This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

E. DORSCH, M. D.
Monroe, Mich.

THE DORSCH LIBRARY.

The private Library of Edward Dorsch, M. D., of Monroe, Michigan, presented to the University of Michigan by his widow, May, 1888, in accordance with a wish expressed by him.

Q
145
.N2

A 954,629

36668

THE NATURALISTS' DIRECTORY

FOR 1879,

CONTAINING THE

Names, Addresses, Special Departments of Study, etc., of the

NATURALISTS, CHEMISTS, PHYSICISTS, METEOROLOGISTS

AND

ASTRONOMERS

OF

NORTH AMERICA.

EDITED
BY
SAMUEL E. CASSINO.

(Copyright secured.)

BOSTON:
S. E. CASSINO, PUBLISHER,
299 WASHINGTON ST.
1879.

INTRODUCTION.

In this edition of the NATURALIST'S DIRECTORY, the body of the work is arranged alphabetically, as in those preceding; but the Index will be found to be arranged by States, thus answering, in part, the requirements of many who have asked that the body of the work be classified by States or sections of the country. The list of Chemists and Physicists is much larger than formerly, and it is desirable that this department be made even larger in the next edition.

It is now proposed to issue the Directory annually, and its date of publication will be about October of each year, thus enabling collectors to exchange duplicates from their summer collections. More space will be allowed for description of specimens for exchange when desired. The arrangement of the next edition will be by States, and will afford an opportunity for the naturalists of each section to see that they are fully represented.

Owing to the great amount of labor in preparing the list under this new arrangement, the work of compilation will be begun at once. As soon as the material now in hand has been arranged, Mss. copies will be sent to gentlemen in each

State for additions, and in this way it is hoped that the work may be increased to double its present proportions. Lists of all books issued during the year will also be given in all future editions.

The list of Societies is omitted in this issue, as its insertion would have considerably delayed the book, which was thought to be undesirable. The list will appear in full in the next edition.

As in the last edition, the editor has had the aid of Miss S. E. Brooks in preparing the work, and thanks are also due to the many who have materially assisted in many ways, but whose names cannot be mentioned for their number.

Boston, Nov. 3d.

TABLE OF CONTENTS.

	Page.
The Naturalist's Directory	7
Index	209
Directory of Chemists and Physicists	229
Astronomers	260
Meteorologists	268
Appendix	271

ERRATA.

No. 488. For CARTUN *read* CARTAN.
" 1308. After L. E. *read* Granville, O.
" 2042. After FREDERICK A. *read* Beverly, Mass.
" 2618. After E. S. *read* Springfield, Mass.
Page 63. For ELLIS, I. WALTER, substitute address in Appendix.
Page 66. For Nos. 656, 657, 658 read 956, 957, 958.

THE NATURALISTS' DIRECTORY.

1. AARON, CHARLES E., A. M., Maryville, E Tenn. *Phæn. Bot., Ferns.* Ex.
2. AARON, EUGENE M., Maryville, E. Tenn. *Ent.: Diurnal Lepidoptera.* Coll. Ex.
3. AARON, Mrs. E. M., Maryville, E. Tenn. *Ent.* Coll.
4. AARON, S. FRANK, Maryville, E. Tenn. *Orn., Oöl., Tax.* Coll. Ex.
5. ABBOTT, C. C., M. D., L. B. 35, Trenton, N. J. *American Archæology* and *local Zoölogy.*
6. ABBOTT, CHAS. S., Antrim, N. H. *Geol., Min., Ent.* Coll. Ex.
7. ACKART, HOWARD, Box 502, Southington, Conn. Coll. Ex.
8. ADAMS, E. F., Box 800, New Ipswich, N. H. *Palæo., Min., Archæo., Orn., Ent., Mollusks.* Coll. Ex.
9. ADAMS, Prof. F. P., Danville, Ind. *Bot., Geol., Micros.* Coll. Ex.
10. ADAMS, J. L., jr., Bloomfield, N. J. *Orn.* Coll. Ex.
11. ADAMS, W. H., Elmore, Peoria Co., Ill. *Palæo., Geol., Archæo.* Coll. *Coal Measure Fossils* and *F. W. Shells* for exchange.
12. ADAMS, Miss ZUE, Topeka, Kans. *Lepidoptera, Coleoptera.* Coll. Ex.
13. ADDRICKS, GEO., Mt. Pleasant, Iowa. Coll.
14. AGASSIZ, ALEX., Curator Mus. Comp Zoöl., Cambridge, Mass. *Gen. Zoöl., Emb.*
15. AIKEN, CHAS. E., Colorado Springs, Colo. *Orn., Oöl., Mam., Min.* Coll. Ex.
16. AIKEN, Prof. W. E. A., M. D., LL.D., Baltimore, Md. *Phæn. Bot., Ferns.* Coll.

17. AINSLIE, C. N., A. B., Rochester, Minn. *Nat. Hist., Ent.* Coll. Ex.
18. AKHURST, J., 32 Nassau St., Brooklyn, N. Y. *Tax.; Ent.: Coleoptera, Lepidoptera.* Coll. Ex.
19. ALDEN, JOHN B., Box 4540, New York City.
20. ALDRICH, JOHN D., 41 College Ave., Indianapolis, Ind. *Lepidoptera, Coleoptera, Mollusks.* Coll. Ex.
21. ALDRICH, T. H., M. E., Montevallo, Shelby Co., Ala. *Con.* Coll. Ex.
22. ALEXANDER, JAMES, jr., Box 322, Auburn, N. Y. *Min., Palæo.* Coll. Ex.
23. ALEXANDER, JNO. B., M. D., Lexington, Mo. *Physiology.*
24. ALLEN, ANSON, Orono, Me. *Ent.: Lepidoptera; Mollusks.* Coll.
25. ALLEN, CHARLES A., Nicasio, Marin Co., Cal. *Orn.* Coll.
26. ALLEN, CHAS. S., Astoria, Queens Co., N. Y. *Orn., Oöl.* Coll.
27. ALLEN, C. J. F., Louisville, Ky. *Micros.*
28. ALLEN, F. A., Principal State Normal School, Mansfield, Tioga Co., Pa.
29. ALLEN, HARRISON, M. D., 117 So. 20th St., Phila., Pa. *Gen. Biol., Mam., Osteol., Myol.*
30. ALLEN, J. A., Ass't, Mus. Comp. Zoöl., Cambridge, Mass. *Mam., Orn.*
31. ALLEN, J. D., Taxidermist and Collector, Denver, Colo. *Vertebrates, Articulates.* Coll. Ex.
32. ALLEN, JAMES E, East Hamlin, N. Y. *Ent.* Coll.
33. ALLEN, JOHN H., Pres. Natick Museum, Natick, Mass. *Min., Anthropol., Vertebrates, Articulates, Mollusks.* Coll. Ex.
34. ALLEN, JONATHAN, Pres. Alfred Univ., Alfred, N. Y. *Palæo., Archæo* Coll. Ex.
35. ALLEN, Prof. O. D., Sheffield Scientific School, New Haven, Conn. *Phæn. Bot., Mosses, Min.* Coll. Ex.
36. ALLEN, R. C., Harristown, Macon Co., Ill. *Orn., Tax.* Coll.
37. ALLEN, R. H., Box 376, New York City. *Orn.* Coll.
38. ALLEN, RICHARD, 62 No. Third St., Troy, N. Y. *Micros.* Ex.
39. ALLEN, TIMOTHY F., M. D., New York City. *Bot.*
40. ALLEN, ZACHARIAH, Providence, R. I. *Geol.*
41. ALLERTON, G. R., Bronxville, Westchester Co., N. Y. *Bot.: Ferns.* Ex.

42. ALLIS, E. W., Adrian, Lenawee Co , Mich. *Oöl., Archæo.*
43. ALLIS, JAMES W., 5 Oak St., Rochester, N. Y. *Ent.: Lepidoptera.* Coll. Ex.
44. ALLIS, L. F., Adrian, Mich. *Oöl., Archæo.*
45. ALLIS, SOLON M., C. E., U. S. Deputy Mineral Surveyor, Tucson, Arizona Terr. *Geol.* Coll. Ex.
46. ALLISON, E. H., Eaton, O. *Phys. Geol.* Coll. Ex.
47. ALLISON, W. E., Clark's Mills, Oneida Co., N. Y. *Orn.* Coll.
48. ALLMENDINGER, Miss E. C., Ann Arbor, Mich. *Bot.* Coll. Ex.
49. AMENDE, C. G., Hoboken, N. J. *Diatoms, Infusoria.*
50. AMES, Mrs. MARY E. PULSIFER, Auburn, Placer Co., Cal. *Phæn. Bot.* Coll. Ex.
51. AMI, H. M., Ottawa, Can. *Bot.*
52. AMORY, R., M. D., Norfolk, Mass. *Physiol.*
53. ANDERSEN, MARTIN L., Ravenswood, Cook Co., Ill. *Gen. Sci.* Coll. *Bird-skins* and *Ferns* of N. W. Ill., for Ex.
54. ANDERSON, C. L., M. D , Santa Cruz, Cal. *Crypt. Bot.: Algæ, Fungi, Filices.* Coll.
55. ANDERSON, ELISHA, Univ. of Chicago, Chicago, Ill. *Bot., Micros.*
56. ANDERSON, Rev. JOSEPH, D. D., Waterbury, Conn. *Amer. Ethnol.* and *Archæo.* Coll. Ex.
57. ANDERSON, W. P., Ottawa, Can. *Bot.*
58. ANDERSON, Prof. W. W., Santa Cruz, Cal. *Micros.*
59. ANDRAS, J. C., Manchester, Scott Co., Ill. *Bot.* Coll. Ex.
60. ANDREWS, Dr. E., 6 16th St., Chicago, Ill.
61. ANDREWS, FRANK D., Vineland, N. J. *Geol., Min., Palæo. Archæo., Photog.* Coll.
62. ANDREWS, J. W., Amesville, Athens Co., Ohio. *Zoöl., Geol.* Coll.
63. ANDREWS, KITTIE GALLUP, Vineland, N. J. *Geol.*
64. ANDREWS, L., Southington, Conn. *Min.: Palæo., Geol., Archæo.* Coll. Ex.
65. ANDREWS, Q. E., M. D., Calumet, Houghton Co., Mich. *Min., Crystallography.* Coll. Ex.
66. ANDRWES, Dr. R. R., Brattle Sq., Cambridge, Mass. *Micros.*
67. ANDREWS, T. L , M. D., Creston, Union Co., Iowa. *Bot.*
68. ANDREWS, T. P., Farina, Fayette Co., Ill. *Bot., Geol., Min.* Coll. Ex.
69. ANDRUS, D. A. K., Box 733, Rockford, Ill. *Con., Archæo.* Coll. Ex.

70. ANGELL, G. J., 110 W. D. Hall, New Haven, Conn. *Micro-Lepidoptera, Larvæ.*
71. ANGUS, J., West Farms, N. Y. City, N. Y. *Lepidoptera in general; Catocala and Sphingidæ in particular; also Indian Relics.* Coll. Ex.
72. ANTISELL, Prof. THOMAS, M. D., Washington, D. C. *Bot.*
73. APGAR, A. C., Trenton, N. J. *Zool., Min.* Coll.
74. APGAR, E. A., State Sup't Public Schools, Trenton, N. J. *Bot., Orn.* Coll.
75. APPLEGATE, I. A., Mt. Carmel, Ind.
76. APPLEGATE, W. A., Yellow Springs, O.
77. APPLETON, FRANCIS H., A. M., Peabody, Mass. *Horticulture.*
78. ARNOLD, C. N., Poughkeepsie, N. Y. *Micros.*
79. ARTES, CHAS. F., Evansville, Ind. *Archæo., Min.*
80. ARTHUR, J. C., Charles City, Iowa. *Bot.* Coll.
81. ASHER, J. M., San Diego, Cal. *Bot.*
82. ASHBURNER, CHAS. A., M. S., Ass't 2nd Geolog. Surv. of Pa., 9 Woodland Terrace, Phila., Pa. *Geol., Min.*
83. ASHBURNER, WM., 240 Montgomery St., San Francisco, Cal. *Micros.*
84. ASHFORD, Dr. A. F., Washington, D. C. *Micros.*
85. ASHMEAD, WM. H., Jacksonville, Fla. *Gen. Nat. Hist.: Orn., Herpetol, Coleoptera, Lepidoptera, Hemiptera.* Coll.
86. ASIRE, MERWIN E., Box 142, Oshkosh, Wis. *Ent.* Coll. Ex.
87. ASQUITH, ALFRED W., 145 Clifton Place, Brooklyn, N. Y. *Coleoptera.* Coll. Ex.
88. ATHERTON, G. D., 74 Broadway, Taunton, Mass. *Min.* Coll. Ex.
89. ATKINS, CHAS. G., Bucksport, Me. *Ichth.*
90. ATKINS, H. A., M. D., Locke, Ingham Co., Mich. *Orn.*
91. ATKINSON, HENRY, Everton, Ontario, Can. *Orn., Oöl.* Coll. Ex.
92. ATKINSON, Dr. I. H., 223 Madison Ave., N. Y. City. *Micros.*
93. ATKINSON, J. C., Henderson, Ky. *Horticulture.* Coll. Ex.
94. ATKINSON, Dr. J. E., 209 W. Biddle St., Baltimore, Md. *Micros.*
95. ATWOOD, CHAS., Moravia, Cayuga Co., N. Y. *Phæn. Bot., Ferns, Mosses, Con.* Coll. Ex.
96. ATWOOD, E. S., East Orange, N. J., *Min., Micros.* Coll.

97. ATWOOD, H. F., 160 La Salle St., Chicago, Ill. *Micros.*, *Parasites*, *Infusoria*. Coll. Ex.
98. ATWOOD, N. E., Provincetown, Mass. *Ichth.*
99. AUGHEY, SAMUEL, Prof. Nat. Sci., Lincoln, Neb. Coll. Ex.
100. AUSTIN, C. F., Closter, N. J. *Mosses*, *Hepaticæ*, *Lichens.*
101. AUSTIN, E. P., 46 E. Newton St., Boston, Mass. *Coleoptera of N. A.* Send ten cents for list of species for sale or exchange.
102. AUSTIN, Mrs. R. M. L., Prattville, Plumas Co., Cal. *Bot.* Coll.
103. AUXER, S., 150 So. Prince St., Lancaster, Pa. *Coleoptera*, *Lepidoptera.* Coll. Ex.
104. AVERILL, WM. D., Chestnut Hill, Phila., Pa. *Min.*, Spec. — *Con.* Ex.
105. AVERY, GEORGE R., Locke, Ingham Co., Mich. *Bot.* Coll. Ex.
106. AYRES, W. O., M. D., Sag Harbor, L. I., N. Y. *Zool.*
107. AYRES, Rev. WM. W., Wickford, R. I. *Bot.* Coll. Ex.
108. BABCOCK, A. L., Sherborn, Mass. *Orn.*, *Ent.* Coll. Ex.
109. BABCOCK, D. D., Canaseraga, Allegany Co., N. Y. *Bot.*, *Gen. Sci.* Coll. Ex.
110. BABCOCK, H. P., 342 Acushnet Ave., New Bedford, Mass. *Orn.* Coll. Ex.
111. BABCOCK, W. IRVING, C. E., 161 Lefferts Place, Brooklyn, N. Y. *Orn.*, *Ool.*, *Metall.* Coll.
112. BACHELLER, F., Lynn, Mass. *Min.* Coll. Ex.
113. BACON, AUSTIN, Natick, Mass. *Gen. Biol.*, *Sanitary Science.*
114. BAER, O. P., M. D. Richmond, Ind. *Bot.*, *Geol.*, *Palæo.*, *Min.*, *Micros.* Coll. Ex.
115. BAGG, EGBERT, jr., 187 Genesee St., Utica, N. Y. *Orn.*, *Oöl.*, Coll. Ex.
116. BAILEY, EDWARD, Wailuku, Hawaiian Islands. *Ferns*, *Mosses*, *Lichens*, *Micros.* Coll. Ex.
117. BAILEY, GEORGE IRVING, 95 Eagle St., Albany, N. Y. *Lepidoptera.*
118. BAILEY, H. B., 51 South St., New York City. *Orn.*, *Ool.* Coll.
119. BAILEY, JAMES S., A. M., M. D., 95 Eagle St., Albany, N. Y. *Lepidoptera*, *Catocalæ and Sphingidæ* especially desired.
120. BAILEY, Prof. L. W., Frederickton, N. B., Can. *Geol.* *Bot.* (local). Coll. Ex.

121. BAILEY, STRATFORD C. H., Cortland-on-Hudson, Westchester Co., N. Y. *Min.* Coll. Ex.
122. BAILEY, THEODORE P., 95 Eagle St., Albany, N. Y. *Lepidoptera.* Ex.
123. BAILEY, W. W., Prof. of Bot., Brown Univ., Providence, R. I. Coll. Ex.
124. BAILIE, CHAS., Care of S. J. Andruss, 19 Beaver Hall, Montreal, Can. *Micros.*
125. BAIRD, JNO., F. B. S., Charlestown, Ind. *Phæn. Bot., Ferns.* Coll. Ex.
126. BAIRD, Prof. SPENCER F., Secretary Smithsonian Institution, 14 Massachusetts Ave., Washington, D. C. *Anthropol., Vertebrates.*
127. BAIRD, WM. R., Box 1848, New York City. *N. J. Zinc Minerals; Min.* Coll. Ex.
128. BAKER, A. B., 79 Shonnard St., Syracuse, N. Y. *Palæo., Tax.* Coll. Ex.
129. BAKER, Prof. A. L., Easton, Pa. *Micros.*
130. BAKER, GEORGE A., Box 1409, South Bend, Ind. *Ent.: Coleoptera.* Coll. Ex.
131. BAKER, HENRY B., M. D., Pres. Lansing Sci. Assoc., Lansing, Mich. *Gen. Biol., Micros., Sanitary Science.*
132. BAKER, LUCAS, Pleasant Place, Cambridgeport, Mass. *Geol., Min., Palæo.*
133. BAKER, P. S., A. M., M. D., Greencastle, Ind. *Ent.* Ex.
134. BAKER, Dr. WASHINGTON H., 1610 Summer St., Phila., Pa. *Micros.*
135. BALDWIN, D. D., Curator Hawaiian Mus., Honolulu, Sandwich Islands. *Crypt. Bot.: Ferns, Mosses; Con.: Land and Fresh Water Shells.* Coll. Ex.
136. BALDWIN, DR. H. R., New Brunswick, N. J. *Micros.*
137. BALLOU, N. E., M. D., Sandwich, Ill. *Arachnida, Ichth.,* Coll. Ex.
138. BALLOU, W. H. Evanston, Ill. *Orn., Geog. Distrib., Emb.* Coll. Ex.
139. BANKS, CHAS. W., Box 373, San Francisco, Cal. *Micros., Geol.* Coll. Ex.
140. BANKS, H. F., South Pueblo, Colo. *Geol., Metall.*
141. BANNAN, GEO. N., Kenosha, Wis. *Micros.*
142. BANNING, MARY E., Baltimore, Md. *Fungi.*
143. BANNISTER, HENRY M., M.D., Evanston, Ill. *Palæo., Geol., Micros., Gen. Biol.* Coll.
144. BARBECK, WM., 1732 Wylie St., Phila., Pa. *Crypt. Bot., Micros.*

145. BARBER, EDWIN A., West Chester, Pa. (Chief of Archæological and Ethnological Department of Permanent International Exhibition, Phila., Pa.) *Archæo., Ethnol.* Spec. — *Pipes and Musical Instruments.*
146. BARDEEN, Prof. F. L., M. D., Ann Arbor, Mich. *Min., Micros.* Ex.
147. BARING, CHARLES, 241 Monroe St., Chicago, Ill. *Fungi, Micros.* Coll.
148. BARKER, DANIEL, Norfolk, Va. *Ferns.*
149. BARKER, JOHN G., Lynn, Mass. *Horticulture, Cool House Orchids.*
150. BARKER SAM'L J., Clifton Springs, Ontario Co., N. Y. *Geol., Micros., Bot.* Coll. of *Fossil Coral* of this locality in exchange for other Fossils.
151. BARLOW, SCOTT, Geolog. Surv. Montreal, Can. *Geol.*
152. BARLOW, THOMAS, Canastota, Madison Co., N. Y. *Ent., Geol.*
153. BARNARD, A. N., Easthampton, Mass. *Micros.*
154. BARNARD, WM. S., S. B., Ph.D., Prof. of *Bot., Zool.*, and *Geol.*, Oskaloosa College. Address Canton, Ill., or Oskaloosa, Iowa.
155. BARNES, CHAS. E., Battle Creek, Calhoun Co., Mich. *Archæo., Geol.* Coll. Ex.
156. BARNES, C. R., Madison, Ind. *Bot.* Coll. Ex.
157. BARNES, Mrs. Dr., 41 Green St., Syracuse, N. Y. *Filices.* Ex.
158. BARNES, WM., L.B. 93, Decatur, Ill. *Lepidoptera.* Coll.
159. BARNS, Dr. JOHN, Milford, Mass. *Micros.*
160. BARON, OSCAR P., Navarro River Mills, Mendocino Co., Cal. *Lepidoptera, Coleoptera.* Coll.
161. BARR, J. FRANK, 137 No. Charlotte St., Lancaster, Pa. *Ool.* Coll. Ex.
162. BARRETT, S. T., Port Jervis, N. Y. *Geol., Palæo.*
163. BARRINGER, WM., Bellefontaine, O. *Micros.*
164. BARRIS, Rev. W. H., Prof. Griswold Coll., Davenport, Iowa. *Geol., Palæo.*
165. BARRON, ALFRED, Oneida Com., Oneida, N. Y. *Mosses, Lichens, Horticulture.* Coll.
166. BARROW, J. W., M. D., New York City. *Micros.*
167. BARROWS, NATHAN, M. D., Meriden, N. H. *Phæn. Plants.*
168. BARROWS, W. B., S. B., Reading, Mass. *Zool.* Coll.
169. BARRY, W. C., Rochester, N. Y. *Bot.*

170. BARTLETT, ARTHUR K., Battle Creek, Mich. *Geol.*, Coll. Ex.
171. BARTLEY, Prof. E. H., Swarthmore Coll., Swarthmore, Pa. *Min.*, *Micros.*
172. BARTON, BOLLING W., M. D., 201 No. Charles St., Baltimore, Md. *Micros.*
173. BARTON, GEO. H., 26 Broadway, Chelsea, Mass. *Geol.*, *Min.* Coll. Ex.
174. BASSETT, DANIEL A., A. M., Crawfordsville, Ind. *Radiates.* Spec., — *Crinoids.*
175. BASSETT, GEO. W., M. D., Vandalia, Ill. *Bot.*, *Min.*, *Geol.*, *Nat. Hist.*, *Indian Relics.* Ex.
176. BASSETT, H. F., Waterbury. Conn. *Ent: Gall-producing Insects of all orders, and Schneumonidæ.* Coll. Ex.
177. BASTIN, Prof. E. S., Univ. of Chicago, Chicago, Ill. *Crypt. Bot.*, *Zool.* Coll. Ex.
178. BATCHELOR, W. A., Elgin, Ill. *Micros.*
179. BATEMAN, ELISTON R., Cedarville, Cumberland Co., N. J. *Ool.* Coll. Ex.
180. BATES, GEO. A., Salem. Mass. *Invertebrates: Worms.*
181. BATES, J. ELWYN, South Abington, Mass. *Bot.*, *Geol.*, *Ool.*, *Ent.* Coll. Ex. in *Lepidoptera.*
182. BATES, J. S., West Scituate, Mass. *Tax.* Coll.
183. BATTERMANN, H., 172 E. 80th St., New York City. *Botanical and Entomological Microscopy.* Coll.
184. BATTEY, T. J., Providence, R. I. *Bot.*, *Min.* Coll. Ex.
185. BATTY, J. H., Taxidermist, Box 40, Parkville, Kings Co., N. Y. *Mam.*, *Orn.*, *Reptiles. Amphibians*, *Ichth.*; *Ent.*: *Lepidoptera*; *Crustacea*, *Mollusks.* Coll. Ex.
186. BAUSCH, ED., B. and Lomb. Opt. Co., Box 354, Rochester, N. Y. *Micros.*
187. BAUSCH, J. J., Optician, Rochester, N. Y.
188. BAXLEY, WM. T., 125 Third St., Oakland, Cal. *Coleoptera.* Coll. Ex.
189. BAXTER, M. S., Adams Basin, Monroe Co., N. Y. *Orchidaceæ*, *Filices.* Coll. Ex.
190. BAYLIES, EDMUND L., Taunton, Mass. *Orn.*, *Herpetol.* Coll.
191. BEACH, E. S., Hudson, Lenawee Co., Mich. *Geol.*, *Min.* Ex.
192. BEACH, Hon. HORACE, Prairie du Chien, Wis. *Min.*, *Geol.*, *Archæo.* Coll. Ex.

193. BEACH, WM. F., Jeffersonville, Ind. *Micros.*
194. BEACH, Prof. WM. H., Beloit, Wis. *Min.*, *Palæo.* Coll. Ex.
195. BEADLE, D. W., St. Catherines, Ontario, Can. *Coleoptera*, *Lepidoptera.* Coll.
196. BEADLE, Rev. HEBER H., Bridgton, Cumberland Co., N. J. *Min.*, *Con.*, *Archæo.* Coll. Ex.
197. BEAL, Prof. F. E. L., C. E., Ames, Iowa. *Gen. Biol.*, *Orn.*, *Oöl.*
198. BEAL, WM., Murphey, Cherokee Co., N. C. *Min.* Coll. Ex.
199. BEAL, W. J., Prof. of Bot. and Hort., Agricultural Coll., Lansing, Mich. *Phæn. Bot.*, *Ferns*, *Micros.* Coll.
200. BEAN, F. E., Taxidermist, Medford, Mass. *Orn.*, *Oöl.* Coll. Ex.
201. BEAN, TARLETON H., M. D., Smithsonian Inst., Washington, D. C. *Ichth.*
202. BEAN, THOMAS E., Galena, Ill. *N. A. and European Lepidoptera.*
203. BEAN, W. H., Lebanon, O. *Palæo.*, *Min.*, *Mollusks*, *Bot.*, *Ent.*, *Archæo.*, *Horticulture.* Spec.—*Lower Silurian Fossils.* Coll. Ex.
204. BEARCE, GIDEON, West Minot, Me. *Min.* Coll. Ex.
205. BEARD, JOHN, Attica, O. *Gen. Nat. Sci.* Coll. Ex.
206. BEARDSLEE, HENRY C., M. D., Painesville, Lake Co., O. *Gen. Bot.*: *Cyperaceæ*, *Filices*, *Musci*, *Hepaticæ.* Coll. Ex.
207. BEARDSLEY, A. E., B. S., Pontiac, Ill. *Crypt. Bot.*, *Zool.*, *Vert. Emb.*, *Micros.* Coll. Ex.
208. BEATH, J. W., Lapidist, 712 Chestnut St., Phila., Pa. *Min.*
209. BEATTY, C. C., Missisquoi Bay, Philipsburg, Quebec, Can. *Orn.*
210. BEAUCHAMP, Rev. WM. M., Baldwinsville, Onondaga Co., N. Y. *Archæo.*, *Mollusks.* Coll.
211. BEAVER, DANIEL B. D., M. D., 31 No. 5th St., Reading, Pa. *Phæn. Bot.*, *Ferns.* Coll. Ex.
212. BEBB, M. S., Fountaindale, Winnebago Co., Ill. *Bot.*: *Salices.* Coll. Ex.
213. BECHDOLT, R. G., So. Bethlehem, Pa. *Bot.*
214. BECHLER, GUSTAVUS R., late U. S. Geolog. Surv., Washington, D. C.
215. BECKETT, SYLVESTER B., Vice Pres. Nat. Hist. Soc., Portland, Me. *Orn.*

216. BEDFORD, P. W., Prof. of Pharmacy, Box 1738 New York City. *Micros.*
217. BEEBE, WM. S., 25 Grace Court, Brooklyn, N. Y. *Anthropol.*
218. BEECHER, CHARLES E., Warren, Pa. Ass't on State Geol. Surv. of New York, Albany, N. Y. *Palæo.*, *Mollusks.* Coll. Ex.
219. BEECHER, Prof. JOHN SLOCUM, Columbia, Tenn. *Geol.*, *Palæo.*, *Mollusks.* Coll. Ex.
220. BEHR, H. H., M. S., San Francisco, Cal. *Lepidoptera.*
221. BEHRENS, JAMES, Box 1173 San Francisco, Cal. *Coleoptera*, *Lepidoptera.* Coll.
222. BEIFIELD, Dr. WM. T., Cook Co. Hospital, Chicago, Ill. *Micros.*
223. BELANGER, F. X., Université Laval, Quebec, Can. *Gen. Nat. Hist.* Coll. Ex.
224. BELFRAGE, G. W., Clifton, Bosque Co., Texas. *Ent.: Hymenoptera of the World; Crustacea: Phyllopoda.* Coll. *Coleoptera* and *Lepidoptera* for exchange.
225. BELL, Miss CLARA, Chicopee, Mass. *Bot.: Ferns* Coll. Ex.
226. BELL, Rev. GEORGE, A. B., LL.D., Walkerton, Ontario, Can. *Geol.*, *Anthropol.*, *Archæo.*
227. BELL, Prof. G. H., Battle Creek, Mich. *Bot.*
228. BELL, JAMES T., Prof. of *Min.* and *Agric.*, Albert Univ., Belleville, Ontario, Can. *Geol.*, *Palæo.*, *Micros.*, *Ent.* Coll. of Insects only.
229. BELL, ROBERT, M. D., Senior Ass't Director Geolog. Surv. of Canada, Montreal, Can. *Geol.*, *Anthropol.*, *Mam.* Coll. Ex.
230. BEMENT, CLARENCE S., 1804 Spring Garden St., Phila., Pa. *Min.*
231. BENDIRE, CHAS. E., Capt. 1st Cav., U. S. A., Fort Walla Walla, Washington Terr. *Mam.*, *Orn.*, *Oöl.* Coll. Ex.
232. BENJAMIN, M., Ph. B., 10 Barclay St., New York City. *Min.* Coll. Ex.
233. BENNER, FRANKLIN, Astoria, L. I., N. Y. *Orn.*, *Oöl.* Coll. Ex.
234. BENNETT, JAMES, Leominster, Mass. *Geol.* Coll.
235. BENNETT, JAS. L., Providence, R. I. *Bot.: Filices.* Ex.
236. BENNETT, JOHN C., Syracuse, N. Y. *Min.*, *Con.*, *Palæo.*, *Archæo.* Coll. Ex.
237. BENSON, DAVID, Hoboken, N. J. *Histol.*, *Gen. Micros.*

238. BERGEN, J. G., jr., A. M., Deerfield, Mass. *Min.*, *Geol.* Coll. Ex.
239. BERRY, GEORGE H., North Livermore, Me. *Ent.*, *Oöl.* Coll.
240. BERLIN, A. F., Reading, Pa. *Archæo.* Coll. Ex.
241. BERTOLET, R. M., M. D., Philadelphia Hospital, Phila., Pa. *Micros.*
242. BESSELS, EMIL, M. D., Smithsonian Inst., Washington, D. C. *Gen. Biol.*, *Anthropol.*
243. BESSEY, C. E., Prof. of Botany, Iowa Coll. of Agric., Ames, Iowa. *Bot.* Coll. Ex.
244. BETHUNE, Rev. C. J. S., Port Hope, Ontario, Can. *Prac. Ent.: Coleoptera*, *Lepidoptera.* Coll.
245. BICKMORE, Prof. ALBERT S., Supt. Mus. Central Park, 77th St. and 8th Ave., New York City. *Anthropol.*
246. BICKNELL, EUGENE P., Riverdale, New York City. *Orn.*, *Bot.*
247. BIDDLECOME, Miss H. J., Box 246 Akron, O. *Crypt. Bot.: Filices*, *Musci*, *Hepaticæ*, *Lichens.* Coll. Ex.
248. BIDWELL, E. C., M.D., Vineland, N. J. *Fungi.*
249. BILLIN, CHAS. E., Ass't Geolog. Surv. of Pa., 4039 Locust St., Phila., Pa. *Geol.*, *Archæo.*
250. BILLINGS, HOSMER H., Elmira, N. Y. *Orn.*, *Coleoptera.*
251. BILLINGS, W. R., Ottawa, Can. *Geol.*
252. BINGHAM, R. F., Santa Barbara, Cal. *Horticulture*, *Mollusks.* Coll.
253. BINGHAM, Mrs. R. F., Santa Barbara, Cal. *Phæn. Bot.*, *Algæ.* Coll. Ex.
254. BINKLEY, S. H., Alexandersville, Montgomery Co., O. *Archæo.*, *Geol.*, *Ent.* (in part). Coll.
255. BINNEY, W. G., Burlington, N. J. *American Land Shells.* Coll.
256. BIRGE, EDWARD A., Prof. of Zoöl., Univ. of Wisconsin, Madison, Wis. *Gen. Zoöl.: Cladocera.*
257. BISCOE, T. D., Prof. of Nat. Sci., Marietta, O. *Crypt. Bot.*, *Micros.* Coll.
258. BISHOP, CHAS. L., Jamestown, N. Y. *Fungi*, *Vert. Palæo.*, *Geol.*, *Vertebrates*, *Reptiles*, *Lepidoptera*, *Radiates.* Coll. Ex.
259. BISHOP, JAMES N., Plainville, Conn. *Bot.*, *Micros.* Coll. Ex.
260. BISHOP, N. H., New York City.
261. BISSELL, Dr. W. D., Mobile, Ala. *Micros.*

262. BLACHLY, C. P., Manhattan, Kans. *Orn.*, *Zoöl.*, *Tax.* Coll.
263. BLACKBURN, EDWIN, Cor. Bolton and Dolphin Sts., Baltimore, Md. *Geol.*, *Min.*, *Bot.* Coll. Ex.
264. BLACKFORD, EUGENE G., Fulton Market, New York City. *Ichth.*
265. BLACKHAM, GEORGE E., M. D., Dunkirk, N. Y. *Diatoms*, *Micros.*, *Protozoa*, *Infusoria.* Coll. Ex.
266. BLACKIE, GEO. S., A. M., M. D., Ph. D., Prof. of Botany, Tennessee Coll. of Pharmacy, Nashville, Tenn. *Bot.* Coll.
267. BLACKWELL, WM. B., New Tacoma, Washington Terr. *Mollusks.* Coll.
268. BLAIR, THOS. O., New Castle, Henry Co., Ind. *Ent.: Coleoptera.*
269. BLAISDELL, FRANK E., Poway Valley, San Diego Co., Cal. *Ferns*, *Orn.*, *Oöl.*, *Coleoptera.* Coll. Ex.
270. BLAKE, C. J., Hotel Berkeley, Boston, Mass. *Otology.* Coll.
271. BLAKE, E. J., North Bridgton, Me. *Orn.* Coll. Ex.
272. BLAKE, J. HENRY, 109 Ellery St., Cambridge, Mass. *Mollusca.*
273. BLAKE, JOHN M., New Haven, Conn. *Optics*, *Photography.*
274. BLAKE, Rev. JOSEPH, Gilmanton, N. H. *Bot.* Coll. Ex.
275. BLAKE, WM. P., New Haven, Conn., or Smithsonian Inst., Washington, D. C. *Mineralogy*, *Geology*, *Metallurgy*, *Mining*, *Industrial Art.* Coll. Ex.
276. BLANCHARD, E. R., 413 Broadway, N. Y. City. *Phæn. Bot.*, *Gen. Biol.*
277. BLANCHARD, FERDINAND, M. D., Union Springs, Vt. *Bot.*
278. BLANCHARD, FREDERICK, Box C C, Lowell, Mass. *Ent.: Coleoptera.* Coll. Ex.
279. BLAND, THOMAS, 45 & 47 Exchange Place, N. Y. City. *Mollusca.* Coll.
280. BLATCHFORD, E. W., 375 No. La Salle St., Chicago, Ill.
281. BLEASDELL, Rev. WM., A. M., D. C. L., Trenton, Ontario, Can. *Geol.*, *Invert. Palæo.*, *Archæo.*, *Orn.*, *Geog. Distrib. of Plants and Animals.*
282. BLEW, A. H., Bound Brook, N. J. *Ent.* Ex.
283. BLISS, H. D., Cornell Univ., Ithaca, N. Y. *Orn.*
284. BLISS, RICHARD, jr., Cambridge, Mass. *Archæo.*, *Ichth.*

285. BLOCK, P. D., A. M., St. Vincent's Coll., Beatty, Pa.
286. BLODGETT, WALTER, Providence, R. I. *Min.* Coll. Ex.
287. BLOOD, CHAS L., General Taxidermist and Collector, Taunton, Mass. *Orn.*, *Oöl.*, *Mam.*, *Ent.*, *Mollusca.* Coll. Ex.
288. BLOOM, JULIUS, New Brunswick, N. J. *Micros.*
289. BLUNT, W. G., 813 Market St, San Francisco, Cal.
290. BLÜTHNER, MORITZ S., Lockeford, San Joaquin Co., Cal. *Coleoptera.* Coll. Ex.
291. BOARDMAN, E. O., M. D., Osceola, Ill. *Bot.* Coll. Ex.
292. BOARDMAN, E. R., M. D., Elmira, Stark Co., Ill. *Bot.*, *Ent.* Coll. Ex.
293. BOCK, GEORGE, Hamilton, O. *Bot.*, *Tax.*
294. BOCK, H. P., London, Ontario, Can. *Ent.* Coll.
295. BODGER, J. A., Prof. of Nat. Sci., Abingdon, Ill. *Micros.*
296. BODLEY, ADDISON R., M. D., Angola, Steuben Co., Ind. *Geol.*, *Min.*, *Archæo.*, *Orn.*, *Ent.* Coll. Ex.
297. BODLEY, G. M., Battle Creek, Mich. *Lepidoptera*, *Coleoptera.* Coll. Ex.
298. BOERNER, CHARLES G, Vevay, Ind. *Horticulture*, *Palæo.*, *Geol.*, *Min.*, *Micros.*, *Archæo.* Coll. Ex.
299. BOGERT, E. C., 128 Lexington Ave., New York City. *Micros.*
300. BOICE, CARRIE A., Camden, N. J. *Bot.*
301. BOISEN, HERMANN B., A. M., Bloomington, Ind. *Horticulture.* Coll. Ex.
302. BOLANDER, HENRY N., San Francisco, Cal. *Bot.*
303. BOLL, JACOB, Dallas, Texas. *Orn.*, *Gen. Ent.*, *Geol.*, *Palæo.*, *Mollusks.* Coll.
304. BOLLES, Rev. E. C., Salem, Mass. *Crypt. Bot.*, *Micros.* Coll.
305. BOLLES, WM. PALMER, M.D., Dorchester, Mass. *Bot.* Coll.
306. BOLTER, A., 172-174 Van Buren St., Chicago, Ill. *Ent.* Coll. Ex.
307. BOLTON, H. CARRINGTON, Ph.D., Trinity Coll., Hartford, Conn. *Min.*, *Bibliog. of Science.*
308. BOLTON, JOHN, 49 Huntington St., Cleveland, O. *Ent.*, *Micros.*, *Geol.* Coll. Ex.
309. BOLTON, W. P., Liberty Square, Lancaster Co., Pa. *Bot.*, *Geol*, *Min.*, *Orn.* Coll. Ex.
310. BONBRIGHT, STEPHEN S., Des Moines, Iowa. *Orn.*, *Palæo.* Coll. Ex.

311. BOND, SHADE C., Claryville, Mo. *Phæn. Bot.* Coll.
312. BOND, JOSIAH, jr., Kenosha, Wis. *Ferns.* Coll.
313. BOOKER, W. D., M.D., 152 Madison St., Baltimore, Md. *Gen. Biol., Histol. of Vert.*
314. BOOTH, M. A., Longmeadow, Mass. *Marine Algæ: Diatomaceæ.* Coll. Ex.
315. BORDEN, JAMES D., Trenton Falls, Oneida Co., N. Y. *Trenton Fossils.* Coll.
316. BORDEN, WM. W., Ass't Geolog. Surv., New Providence, Clark Co., Ind. *L. and U. Silurian and Devonian Corals* for exchange.
317. BOSHART, C. FRED., Lowville, N. Y. *Orn., Oöl.* Coll. Ex.
318. BOUDWIN, GEORGE, Wheat Sheaf Lane, below Memphis, Phila., Pa. *Orn.* Coll. Ex.
319. BOUGHTON, H. E., Warren, Mass. *Tax., Orn.* Coll. Ex.
320. BOURLAND, A. M., Van Buren, Ark. *Geol.*
321. BOURNE, A. E., Sandwich, Ill. *Phæn. Bot. Mam.* Coll. Ex.
322. BOUTWELL, W. L., Amherst, Mass. *Bot.* Coll. Ex.
323. BOUVE, THOMAS T., 18 Post Office Square, Boston, Mass. *Geol., Min.* Coll.
324. BOWDITCH, FREDERIC C., Box 615, Brookline, Mass. *Coleoptera.* Coll. Ex.
325. BOWDITCH, H. P., Prof. Physiol., Harvard Med. School, Boston, Mass. *Physiol.*
326. BOWER, WILLIAM, Cedar Rapids, Iowa. *Bot.*
327. BOWERS, DANA L., L. B. 794, Natick, Mass. *Mosses, Fungi, Min., Vert., Ent., Mollusca.* Coll. Ex.
328. BOWERS, JOHN S., 315 Superior St., Cleveland, O. *Micros.*
329. BOWERS, STEPHEN, Ph. D., Santa Barbara, Cal. *Geol., Archæo., Terrestrial and Marine Con., Micros.* Coll. Ex.
330. BOWERS, Mrs. STEPHEN, Santa Barbara, Cal. *Marine Algæ.*
331. BOWERS, STEPHEN, A. M., Greencastle, Ind. *Geol., Archæo.* Ex.
332. BOWLER, E. S., Taxidermist, 17 Ohio St., Bangor, Me. *Bot., Orn., Oöl., Geol.* Coll. Ex.
333. BOWMAN, E. H., M. D., Andalusia, Ill. *Geol.*
334. BOWMAN, GEORGE A., Vienna, Fairfax Co., Va. *Min.* Ex.

335. BOWMAN, R. B., 89 W. Pearl St., Cincinnati, O. *Palæo.*, *Min.*
336. BOWSLAUGH, E. W., Grimsby, Ontario, Can. *Bot.*
337. BOYCE, Mrs. A. A., Santa Barbara, Cal. *Mollusks.*
338. BOYCE, JOHN J., Santa Barbara, Cal. *Orn.*, *Oöl.*
339. BOYCE, Dr. L. R., Albany, N. Y. *Micros.*
340. BOYD, S. B., M. D., Knoxville, Tenn. *Ent.* Coll. Ex.
341. BOYDEN, GEO. E., Box 335, Worcester, Mass. *Micros.*
342. BRACKETT, GEO. E., Belfast, Me. *Ent.*
343. BRACKETT, Dr. J. E., 31 B St. S. E., Washington, D. C. *Micros.*
344. BRACKETT, SOLOMON H., A. M., Teacher of Nat. Sci., St. Johnsbury Acad., St. Johnsbury, Vt. *Tax.* Coll. Ex.
345. BRACKWAY, A. P., Adrian, Mich. *Ent.*
346. BRADLEY, Prof. FRANK H., Nacoochee, Ga. *Bot.*, *Geol.*, *Palæo.*, *Lithol.*, *Bibliog. of Sci*, *Archæo.* Coll.
347. BRADLEY, SAM'L B., West Greece, Monroe Co., N. Y. *Phæn. Bot.*, *Ferns*, *Fungi*, *Philol.* Coll.
348. BRADT, E. F., Marcellus, Mich. *Geol.*, *Archæo.*
349. BRADY, JOHN, Aledo, Ill. *Archæo.*, *Mollusks.* Coll. Ex.
350. BRAGG, CHAS. S., Braggville, Mass. *Min.* Coll. Ex.
351. BRAGG, E. B., 3 Park Place, New York City. *Orn.*, *Geol.* Coll. Ex.
352. BRAGG, LUTHER C., Braggville, Mass. *Zoöl.* Coll. Ex.
353. BRAINERD, Prof. EZRA, Middlebury, Vt. *Phæn. Bot.*, *Ferns.* Coll. Ex.
354. BRAND, JUNIUS A., Norwich, Conn. *Orn.*
355. BRANDEGEE, T. S., C. E., Canon City, Colo. *Phæn. Bot.*, *Ferns*, *Mosses.* Coll.
356. BRANDENBURG, CHAS. A., Indianapolis, Ind. *Micros.*
357. BRASTOW, S. D., Care Wells, Fargo & Co., San Francisco, Cal. *Palæo.*, *Min.* Coll. Ex.
358. BRAUN, FRED, 55 Canal Street, Cincinnati, O. *Palæo.*, *Min.*, *Archæo.* Ex.
359. BRAY, Mrs. MARIA H., West Gloucester, Mass. *Marine Algæ.* Coll. Ex.
360. BRAYTON, A. W., Cook Co. Normal School, Englewood, Ill. *Bot.*
361. BRAYTON, A. W., Irvington, Ind. *Ichth.* Coll.
362. BREESE, J. L., 37 E. 22nd St., New York City. *Orn.*, *Oöl.*
363. BRENDEL, EMIL, M. D., Cedar Rapids, Iowa. *Hymenoptera*, *Coleoptera*, *Orthoptera.* Coll.

364. BRENDEL, FRED, M. D., Peoria, Ill. *Bot., Geog. Distrib., Osteol.* Coll. Ex.
365. BREWER, THOMAS M., 233 Beacon St., Boston, Mass. *Orn.* Coll. Ex.
366. BREWER, Prof. WM. H., Yale College, New Haven, Conn. *Bot.* (of Cal.), *Phys. Geog., Micros.*
367. BREWSTER, CHAS. G., Box 872 Boston, Mass. *Min., Geol., Orn.*
368. BREWSTER, WM., 61 Sparks St., Cambridge, Mass. *Orn., Oöl.* Coll. Ex.
369. BREYLINGER, F. J., Monticello, Green Co., Wis. *Orn.*, Coll.
370. BRIDGHAM, Mrs. S. W., 24 Waverly Place, New York City. *Lepidoptera.*
371. BRIGGS, CHAS. S., M. D., Nashville, Tenn. *Micros.*
372. BRIGGS, S. A., 143 Reade St., New York City. *Diatomaceæ, Desmidiaceæ, Micros.* Coll. Ex.
373. BRIGHAM, WM. T., 95 Milk St., Boston, Mass. *Anthropol., Seismol.* Coll.
374. BRINTON, DANIEL G., M.D., Media, Pa. *Anthropol.*
375. BRITTON, N. L., New Dorp, Staten Island, N. Y. *Bot., Mollusks.* Coll. Ex.
376. BRITTS, JNO. H., M.D., Clinton, Mo. *Palæo.* Coll. Ex.
377. BROAD, WALLACE, A.B., Geolog. Surv., Montreal, Can. *Geol., Lithol., Micros.* Ex.
378. BROADHEAD, GARLAND C., Pleasant Hill, Cass Co., Mo. *Bot., Geol., Archæo.*
379. BROHM, THEO., North Western Univ., Watertown, Wis. *Micros.*
380. BRONTE, Rev. J. H. C., Sacramento, Cal. *Micros.*
381. BROOKS, CHR. C., 153 McCulloch St., Baltimore, Md. *Micros.*
382. BROOKS, ELISHA, 1725 Sutter St., San Francisco, Cal. *Ferns.* Coll. Ex.
383. BROOKS, E. C., Box 15, Mount Auburn, Mass. *Micros.*
384. BROOKS, THOMAS B., Newburgh, N. Y. *Geol., Lithol., Mining, Metall.* Coll. Ex.
385. BROOKS, W. K., Johns Hopkins Univ., Baltimore, Md. *Micros., Gen. Biol., Invert. Emb., Mollusks.*
386. BROOKS, W. R., Madison Univ., Hamilton, N. Y. *Bot., Geol., Gen. Biol., Invert.*
387. BROOKS, W. R., 527 Columbus Ave., Boston, Mass. *Micros.*

388. BROSS, MASON, 550 Dearborn Ave., Chicago, Ill. *Bot.* Coll. Ex.
389. BROUS, H. A., M. D., 4445 Frankford Ave., Phila., Pa. *Coleoptera.* Coll.
390. BROWN, ADDISON, 233 E. 48th St., New York City. *Phæn. Bot*, *Ferns.* Coll. Ex.
391. BROWN, C. D. W., Aurora, Kane Co., Ill. *Bot.*, *Orn.*, *Ent.*, *Geol* Coll. Ex.
392. BROWN, E. T., Mt. Starling, Ky. *Micros.*
393. BROWN, Miss FLORENCE M., Mumford, Monroe Co., N. Y. *Geol.* Coll. Ex.
394. BROWN, G. CARLETON, D. D. S., Mt. Holly, N. J. *Ent.*
395. BROWN, GEO. N., jr., College of N. J., Princeton, N. J. *Micros.*
396. BROWN, G. W., jr., 37 Carteret St., Newark, N. J. *Micros.*
397. BROWN, H. M., 86 State St., Boston, Mass. *Micros.*
398. BROWN, J. E., Bangor, Me. *Orn.* Coll. Ex.
399. BROWN, J. F., 86 State St., Boston, Mass. *Micros.*
400. BROWN, JOHN J., M. D., Sheboygan, Wis. *Bot.*, *Con.* Coll. Ex.
401. BROWN, JAS. STANFORD, 82 Pierrepont St., Brooklyn, N. Y. *Orn.*, *Oöl.*, *Ent.* Ex.
402. BROWN, J. W., M.D., Dora, Wabash Co., Ind. *Geol.*, *Min.*, *Bot.* Coll. Ex.
403. BROWN, NATHAN CLIFFORD, Portland, Me. *Orn.* Coll. Ex.
404. BROWN, R. H., Marcellus, Mich. *Min.*, *Geol.*, *Anthropol.*, *Micros.* Spec.—*Herpetol.*, *Ent.* Michigan specimens in exchange for Gulf States.
405. BROWN, R. WILLIS, Keyport, N. J. *Phæn. Bot.* Coll.
406. BROWN, S. C, Smithsonian Inst., Washington, D. C. *Herpetol.*
407. BROWN, Prof. THOMAS R., M.D., Baltimore, Md. *Micros.*
408. BROWN, WESLEY E., Paxton, Mass. *Min.*, *Micros.* Coll. Ex.
409. BROWN, WM. H., M. D., Cedarville, Herkimer Co., N. Y. *Land and Fresh Water Mollusks.* Coll. Ex.
410. BROWN, W. O, M.D., Pres. Franklin Society, Providence, R. I.
411. BROWNE, GEO. E., Dedham, Mass. *Nat. Hist.*, *Tax.* Coll.
412. BROWNELL, W. A., A.M., Ph.D., Prof. of Nat. Sci., Syracuse, N. Y. *Geol.*, *Min.* Coll. Ex.

413. BROWNING, F. T., Orange, N. J. *Oöl.* Coll. Ex.
414. BRUNER, LAWRENCE, West Point, Cuming Co., Neb. *Ent.*, *Con.*, *Fossils.* Coll. Ex.
415. BRUNNER, D. B., A. M., Reading, Pa. *Min.*, *Orn.*, *Archæo* Coll. Ex.
416. BRUSH, GEORGE J., Prof. of Min., Sheffield Scientific School, Yale College, New Haven, Conn. *Min.* Coll.
417. BRYANT, D. S., Box 890, San Francisco, Cal. *Orn.* Coll.
418. BRYANT, F. A , Cedar Falls, Iowa. *Micros.*
419. BRYANT, WALTER E., Box 890, San Francisco, Cal. *Orn.*, *Oöl.*, *Coleoptera.* Coll.
420. BRYANT, WM. M., St. Louis, Mo. *Micros.*
421. BUCK, STUART M., Mining Engineer, Coalburg, W. Va.
422. BUCKHOUT, Prof. W. A., State College, Pa. *Phæn.* *Bot.*, *Osteol.*, *Ent.* Coll.
423. BUCKLEY, SAMUEL B., A. M., Ph. D., State Geologist, Austin, Texas.
424. BULLARD, G. B., M. D., St. Johnsbury, Vt. *Micros.*
425. BULLOCH, W. H., Manufacturer of Microscopes, 126 Clarke St., Chicago, Ill. *Optics.* Coll.
426. BULSON, Miss JULIETTE, Camden, N. J. *Bot.* Coll.
427. BUMSTEAD, FREEMAN J., M. D., 24 E. 38th St., New York City. *Phæu.* *Bot.* Coll.
428. BUNCE, Miss EDNA DE LA M., Box 65, Ridgewood, Bergen Co., N. J. *Ent.: Coleoptera.* Coll. Ex.
429. BUNDY, WILL F., Sauk City, Sauk Co., Wis. *Bot.: Fungi; Ichth., Orn., Ent., Fresh Water Crustacea.* Coll. Ex.
430. BUNKER, F. STORY, Cambridge, Somerset Co., Me. *Bot.*, *Micros.* Coll.
431. BUNKER, ROBERT, 14 Jay St., Rochester, N. Y. *Ent.: Lepidoptera. Diptera.*
432. BUNN, GEORGE B., 320 Belgrade St., Phila., Pa. *Ent.* Coll. Ex.
433. BUNN, JACOB G., 320 Belgrade St., Phila., Pa. *Ent.* Ex.
434. BUNN, W. C., 320 Belgrade St., Phila., Pa. *Coleoptera.* Coll. Ex.
435. BURBANK, L. S., Warren Acad., Woburn, Mass. *Geol.*, *Min.* Coll.
436. BURDICK, E. A., 649 B St. N. E., Washington, D. C. *Micros.*
437. BURGESS, EDWARD, Sec'y Nat. Hist. Soc., Boston, Mass. *Anat.; Ent.: Diptera.*

438. BURGESS, EDWARD SANFORD, Teacher of Classics, Delaware Literary Inst., Franklin, Delaware Co., N. Y. *Bot.* Coll. Ex.
439. BURGESS, ROBERT, Ames, Iowa. *Bot.* Coll. Ex.
440. BURKE, JOSEPH C., A.M., Teacher of Nat. Sci., Wesleyan Acad., Wilbraham, Mass. Coll. Ex.
441. BURNETT, H. S., Kendall, Orleans Co., N. Y. *Phæn. Bot., Ferns, Micros.* Coll. Ex.
442. BURNETT, S. M., Washington, D. C. *Micros.*
443. BURQUE, Rev. F. X., Prof. at St. Hyacinthe Coll., St. Hyacinthe, Quebec, Can. *Gen. Bot., Ent.* Coll. Ex.
444. BURR, FEARING, Hingham Centre, Mass. *Horticulture, Archæo.*
445. BURRILL, T. J., Prof. of Bot., Ill. Indust. Univ., Urbana, Ill. *Fungi, Micros.* Coll. Ex.
446. BURRITT, LORIN, Uniondale, Pa. *Micros.*
447. BURROUGHS, JOHN, Esopus-on-the-Hudson, N. Y. *Orn.*
448. BURT, CHAS. A., Oneida, N. Y. *Min.*
449. BUSH, Mrs. A. E., Curator State Normal School Museum, San Jose, Cal. *Bot., Con., Min., Marine Algæ, Fossils.* Coll. Ex.
450. BUSH, B. F., Detroit, Mich. *Archæo.*
451. BUSH, C. G., Providence, R. I. *Micros.*
452. BUSH, WALTER D., Wilmington, Del. *Orn.* Coll. Ex.
453. BUSHEE, Prof. JAMES, Worcester, Mass. *Min., Geol.* Coll. Ex.
454. BUSTEED, J., M. D., New York City. *Micros.*
455. BUTLER, AMOS W., Brookville, Franklin Co., Ind. *Archæo., Con., Orn., L. and F. W. Shells, Birds of Ohio Valley.* Coll. Ex.
456. BUTLER, GEO. D., Fort Jones, Siskiyou Co., Cal. *Phæn. Bot., Ferns, Min.* Coll. Ex.
457. BUTLER, NOBLE, Louisville, Ky. *Micros.*
458. BUTTON, F. L., 670 Second St., Oakland, Cal. *Mollusks.* Coll. Ex.
459. BUTTON, H. M., Norwich, N. Y. *Geol.*
460. BYERS, WM. N., Denver, Colo. Coll.
461. BYRNES, THOMAS, Walcott, Scott Co., Iowa. *Min.* Coll.
462. CABOT, WM. R., Brookline, Mass.
463. CABEEN, T. B., Keithsburg, Ill. *Geol., Archæo.*
464. CALDWELL, JAMES G., jr. Jeffersonville, Ind. *Palæo., Geol.* Coll. Ex.

465. CALKINS, Prof. MARSHALL, M. D., Springfield, Mass. *Micros.*

466. CALKINS, Col. WM. W., Naturalist, 238 So. Water St., Chicago, Ill. Spec.—*Con.*, *Bot.*

467. CALL, Prof. R. ELLSWORTH, Mohawk, N. Y. *Invert. Palæo.*, *Geol.*, *Mollusks*, *Crustacea*, *Geog. Distrib.* Coll. Ex.

468. CALLENDER, T. O., 216 Union St., Brooklyn, N. Y. *Oöl.* Coll. Ex.

469. CALVIN, SAMUEL, Prof. Nat. Sci., Iowa State Univ., Iowa City, Iowa. *Geol.*. *Zöol.* Coll. Ex. for *Invertebrate Fossils.*

470. CAMERON, ALEX. G., Newtown, St. Mary's, Guysboro Co., N. S. *Bot.* Coll. Ex.

471. CAMERON, G., jr., 231 7th St., Buffalo, N. Y. *Coleoptera*, *Lepidoptera.* Coll.

472 CAMPBELL, Rev. E. V., St. Cloud, Stearns Co., Minn. *Gen. Bot.*: *Ferns.* Coll. Ex.

473. CAMPBELL, GEO. W., Delavan, Ill. *Bot.*, *Micros.*

474. CANBY, WM. M., 1101 Delaware Ave., Wilmington, Del. *Phæn. Bot.*, *Ferns.* Coll. Ex.

475. CANDEE, F. J., Moline, Ill. *Min.*, *Geol.*, *Invert. Palæo.* Coll. Ex.

476 CANEDAY, D. A., Taylor's Falls, Chisago Co., Minn. *Geol.*, *Min.*

477. CANFIELD, FREDERICK A., Dover, N. J. *Min.*

478. CANTINE, THOS. B., Box 555, Orange, N. J. *Orn.* Coll. Ex.

479. CARBINE, H., M. D., Marcellus, Mich. *Micros.*, *Biol.*, *Emb.*

480. CARDEZA, JOHN T. M., M. D., Claymont, New Castle Co., Del. *Min.* Coll. Ex.

481. CARPENTER, Dr. C. F., Louisville, Ky. *Micros.*

482. CARPENTER, G. C., Prof. of Nat. Sci., Indianola, Iowa. *Gen. Nat. Sci.* Coll.

483. CARPENTER, H. F., 29 and 31 Page St., Providence, R.I. *Min.*, *Mollusks.* Coll.

484. CARPENTER, WM. B., M. D., Lansing, Leavenworth Co., Kans. *Phæn. Bot.*, *Ferns*, *Geol.*, *Min.*, *Micros.*, *Archæo.*, *Orn.*, *Ent.* Coll. Ex.

485. CARR, C., Morris, Ill. *Fossil Flora of Grundy Co. Coal Measures.* Coll. Ex.

486. CARR, LUCIEN, Ass't Curator, Peabody Mus., Cambridge, Mass. *Anthropol.*

487. CARTER, JOSEPH, Sup't Public Schools, Peru, Ill. *Bot.: Ferns of Illinois; Micros.* Coll.

488. CARTUN, FRED J., Medicine Lodge, Barbour Co., Kans. *Tax.*

489. CASE, H. B., McKay, Ashland Co., O. *Archæo.*, *Geol.*, *Palæo.*, *Orn.*; *Ent.*: *Coleoptera.* Coll. Ex.

490. CASE, L. B., Richmond, Ind. *Phæn. Bot.*, *Ferns.*

491. CASE, THEODORE S., Editor Kansas City Review of Science and Industry, Kansas City, Mo. *Gen. Sci.*

492. CASSINO, SAMUEL E., Salem, Mass. *N. A. Filices*, *Ent.* Desires specimens of *Mallophaga* from all birds and mammals.

493. CASTLE, D. M., M. D., 2007 Arch St., Phila., Pa. *Coleoptera.* Coll. Ex.

494. CATE, WILL A., B. S., Prin. Chatata Sem., Chatata, Bradley Co., E. Tenn. *Geol.*, *Min.*, *Palæo.* Coll. Ex.

495. CATLIN, J. C., Ravenna, O. *Local Bot.*, *Orn.*, *F. W. Shells*, *Crania of Am. Quadrupeds.* Coll.

496. CHACE, Prof. GEORGE I., Providence, R. I. *Geol.*

497. CHADBOURNE, P. A., Pres. Williams Coll., Williamstown, Mass. *Phys. Geol.*, *Gen. Biol.* Coll.

498. CHALMERS, ROBERT, Bathurst, N. B. *Bot.*, *Geol.* Coll. Ex.

499. CHAMBERLAIN, C. W., M.D., Hartford, Conn. *Bot.*, *Micros.*, *Gen. Biol.*, *Emb.*, *Histol of Vert.*, *Sanitary Science.*

500. CHAMBERLIN, LEWIS C., Pennville, Ind. *Phæn. Bot.*, *Min.*, *Palæo.*, *Geol.* Coll. Ex.

501. CHAMBERLIN, S. N., Daytona, Volusia Co., Fla. *Bot.*, *Micros.*

502. CHAMBERLIN, T. C., State Geologist, Beloit College, Beloit, Wis. *Geol.*

503. CHAMBERS, ROBERT W., 126 Fort Green Place, Brooklyn, N. Y. *Lepidoptera*, *Coleoptera.* Coll. Ex.

504. CHAMBERS, V. T., Covington, Ky. *Micros.*

505. CHANCE, H. MARTYN, C. E., Ass't Geologist 2nd Geolog. Surv. of Pa., 2433 Fairmount Ave., Phila., Pa. *Geol.*

506. CHANDLER, CHAS. H., 764 Main St., Cambridgeport, Mass. *Orn.* Coll. Ex.

507. CHANDLER, ELI H., Box 51, Topeka, Kans. *Min.* Coll. Ex.

508. CHAPMAN, Dr. A. W., Apalachicola, Fla. *Southern Botany.*

509. CHAPMAN, HENRY, Naturalist and Taxidermist, 602 California St., San Francisco, Cal.
510. CHAPMAN, H. C., M. D., Prof. of Physiol., Pa. Coll. of Dental Surgery, 2305 Walnut St., Acad. Nat. Sci., Phila., Pa. *Gen. Biol., Vert.*
511. CHAPMAN, H. L., Marcellus, Mich. *Orn., Min., Mam.* Coll. Ex.
512. CHAPMAN, W. H., M. D., Peoria, Ill. *Geol., Palæo.*
513. CHASE, ARNOLD B., Central Falls, R. I. *Micros.*
514. CHASE, Mrs. CARRIE, Wells, Elko Co., Nev. *Bot., Ent.* Coll.
515. CHASE, CHARLES A., Worcester, Mass. *Palæo.*
516. CHASE, FRED A., Prof. Phys. Sci., Fisk Univ., Nashville, Tenn. *Micros.* Coll. Ex.
517. CHASE, GEO. S., L. B. 1091, Topeka, Kans. *Palæo.* Coll. Ex.
518. CHASE, HENRY S., M. D., St. Louis, Mo. *Micros.*
519. CHASE, JOSEPH E., L. B. 46, Holyoke, Mass. *Lepidoptera, Coleoptera, Oöl.* Coll. Ex.
520. CHASE, Dr. S. F., Salem, Mass. *Min.* Coll. Ex.
521. CHASE, THEODORE R., Detroit, Mich. *Palæo., Geol., Min., Gen. Biol., Anthropol.* Coll. Ex.
522. CHATFIELD, A. F., Albany, N. Y. *Lepidoptera.* Coll. Ex.
523. CHENEY, T. A., LL.D., Starkey, Yates Co., N. Y. *Palæo., Geol., Ethnol., Archæo.* Coll.
524. CHESEBRO, DENISON S., Box 327, Syracuse, N. Y. *Crustacea, Mollusks.* Coll.
525. CHESHIRE, WM. W, Crown Point, Lake Co., Ind. *Geol., Archæo.* Coll.
526. CHESTER, Prof. ALBERT H., Hamilton College, Clinton, Oneida Co., N. Y. *Min.* Coll.
527. CHICKERING, J. J., Box 524, Amherst, Mass. *Orn., Oöl.* Coll. Ex.
528. CHICKERING, Rev. J. W., Washington, D. C. *Bot.* Ex.
529. CHILD, HARRY P., Kansas City, Mo. *Con., Geol., Palæo., Archæo., Min., Herpetol.* Coll.
530. CHILDS, A. B., Akron, O. *Palæo., Geol., Min., Vert.* Coll. Ex.
531. CHITTENDEN, GEO. B., Topographical and Landscape Engineer, Washington, D. C.
532. CHITTENDEN, Prof. R. H., Yale College, New Haven, Conn. (Absent in Europe.) *Micros.* Coll. Ex.
533. CHRISPELL, P.L., Lafayette, N. J. *Ent.: Lepidoptera.*

534. CHRISTIAN, GEO. H., Minneapolis, Minn.
535. CHRISTIAN, JOHN B., Mount Carroll, Ill. *Geol.*, *Palæo.*, *Gen. Sci.*
536. CHRISTY, S. B., Ph. B., Univ. of California, Berkeley, Cal. *Metall.*
537. CHURCH, A. M., Lyons Falls, N. Y. *Geol.*, *Orn.* Coll.
538. CHURCH, Mrs. A., Lyons Falls, N. Y. *Ferns.*
539. CHURCH, JOHN A., Mining Engineer, Columbus, O. *Metall.*, *Min.*
540. CHURCH, Miss NELLIE, Lyons Falls, N. Y. *Bot.*
541. CHURCHILL, Mrs. FRANK C., Lebanon, N. H. *Min.*, *Fossils.* Coll. Ex.
542. CHURCHILL, J. R., 82 Devonshire St., Boston, Mass. *Phæn. Bot.*, *Ent.*
543. CLARK, DWIGHT, 68 Bradford St., Springfield, Mass. *Min.* Coll. Ex.
544. CLARK, E. B., Utica, N. Y. *Orn.* Coll. Ex.
545. CLARK, E. W., M. D., Grinnell, Iowa. *Micros.*
546. CLARK, F. C., Providence, R. I. *Micros.*
547. CLARK, ISAAC D., 597 Broad St., Newark, N. J. *Orn.*, *Tax.*, *Oöl.* Coll. Ex.
548. CLARK, JANE L., Easthampton, Mass. *Orn.*, *Oöl.* Coll. Ex.
549. CLARK, JOHN, West Chester, Pa. *Bot.*
550. CLARK, J. A., Lostant, La Salle Co., Ill. *Geol.*, *Min.*, *Ethnol.* Coll. Ex.
551. CLARK, SIMEON TUCKER, A. M., M. D., Corr. Sec. Jewett Scientific Soc., Box 155, Lockport, Niagara Co., N. Y. *Con.* Coll. Ex.
552. CLARK, WILLIAM C., L. B. 22, Rockport, Mass. *Ent.*, *Orn.*, *Oöl.* Coll. Ex.
553. CLARK, WILLIS J., Oak Centre, Wis. *Orn.*, *Oöl.*
554. CLARK, W. S., Pres. Agric. Coll., Amherst, Mass. *Horticulture*, *Gen. Biol.* Coll. Ex.
555. CLARK, XENOS Y., 916 Washington St., San Francisco, Cal. *Micros.*, *Gen. Biol.*
556. CLARKE, DANIEL, M. D., Flint, Mich. *Bot.*: *Willows*, *Sedges*, *Grasses*, *Ferns.* Coll. Ex.
557. CLARKE, JOHN M., Ass't in Geology, Amherst College, Box 495, Amherst, Mass. Coll. Ex.
558. CLARKE, JOHN W., Prof. of Geol., University of Chicago, Washington Heights, Ill. *Geol.*, *Antiquity of Man.* Coll. Ex.

559. CLARKE, ROBERT P., Box 331, Chicago, Ill. *Orn.* Coll. Ex.
560. CLARKE, SAMUEL F., Fellow Johns Hopkins Univ., Baltimore, Md. *Gen. Biol., Hydrozoa.* Coll. Ex.
561. CLARKE, S. C., Jamaica Plain, Mass. *Ichth.*
562. CLARKE, W. P., Milton, Rock Co., Wis. *Archæo,* Coll. Ex.
563. CLAY, H. C., M. D. Shreveport, La. *Micros.*
564. CLAYBROOKE, G., Santa Monica, Los Angeles Co., Cal. *Bot.*
565. CLAYPOLE, EDW. W., B.A., B. Sc. (London), Antioch College, Yellow Springs, O. *Geol.* Coll.
566. CLAYTON, J. R., D.D.S., Shelbyville, Ind. (Prof. of Mech. Dentistry, Ohio Coll. Dental Surgery, Cincinnati, O.) *Microscopy of Dental Tissues.* Coll.
567. CLAYTON, THOMAS W., 674 34th St., Oakland, Cal. *Orn.* Coll.
568. CLEAVELAND, FRANK N., Canton, N. Y. *Min.* Coll. Ex.
569. CLEMENT, ASA, Lowell, Mass. *Horticulture, Orn., Ent.*
570. CLEMENTI, Rev. VINCENT, B.A. Cantab., Peterboro, Ontario, Can. *Bot., Orn., Coleoptera, Lepidoptera.* Coll.
571. CLEMENTS, GABRIELLE D., Scientific Artist, 750 So. 18th St., Phila., Pa.
572. CLENEAY, THOMAS, 402 W. 6th St., Cincinnati, O. *Archæo.* Coll. Ex.
573. CLEVELAND, DANIEL, San Diego, Cal. *Ferns, Marine Algæ.* Coll. Ex.
574. CLIFFORD, F. S., 23 School St., Boston, Mass. *Sponges.*
575. CLINTON, GEO. W., Buffalo, N. Y. *Bot.* Coll. Ex.
576. COALE, H. K., 1061 Wabash Ave., Chicago, Ill. *Orn.* Coll. Ex.
577. COCHRAN, J. TRAVIS, 1820 Spruce St., Phila., Pa. *Micros.*
578. COCHRANE, J., A. M., Havana, Mason Co., Ill. *Bot., Nat. Hist.* Coll. Ex.
579. COCHRANE, J. D., East Corinth, Me. *Nat. Sci.* Spec.—*Bot.* Coll. Ex.
580. COE, W. W., Portland, Conn. *Mam., Orn., Ichth.* Coll. Ex.
581. COFFINBERRY, W. L., Grand Rapids, Mich. *Archæo.* Coll.

582. COFFMAN, Jos. H., Augusta, Ill. *Min., Geol.* Coll. Ex.
583. COHEN, J. S., M. D., Phila., Pa. *Micros.*
584. COLEGROVE, JAMES, 38 Madison St., Chicago, Ill. *Crypt. Bot.*
585. COLEMAN, NATHAN, Berlin, Conn. *Bot.: Mosses; Ent.: Lepidoptera, Coleoptera.* Coll. Ex.
586. COLES, ISAAC, Glen Cove, Queens Co., N. Y. *Phæn. Bot., Orn.* Coll. Ex.
587. COLLETT, JOHN, Ass't State Geolog. Surv., Newport, Ind. *Geol., Palæo., Archæo.* Coll.
588. COLLIER, GEO. H., Prof. Nat. Sci., Willamette Univ., Salem, Oregon. *Bot.* Coll.
589. COLLIER, JAMES M., Myers, Fla.
590. COLLIER, PETER, Dep't of Agric., Washington, D. C. *Min.*
591. COLLIN, ALONZO, Prof. of Nat. Sci., Cornell College, Mount Vernon, Iowa. *Geol., Palæo., Min.* Coll. Ex.
592. COLLINS, FRANK S., Box 55, Malden, Mass. *Bot.: Algæ, Ferns.* Coll. Ex.
593. COLLINS, W. H., 152 Woodward Ave., Detroit, Mich. *Orn., Oöl., Zoöl.* Coll.
594. COLLINS, WM. L, Frankford, Phila., Pa. *Orn., Oöl.* Coll. Ex.
595. COLLIS, R. O., Madisonville, O. *Archæo., Zoöl., Geol., Palæo.* Coll.
596. COLMAN, HENRY, M. D., Swampscott, Mass. *Anat., Histol.*
597. COLTON, W. E., New York City. *Micros.*
598. COLVIN, VERPLANCK, Sup't New York State Adirondack Survey, Albany, N. Y.
599. COMMONS, ALBERT, Faulkland, Del. *Phæn. Bot.* Coll.
600. COMSTOCK, FRANK M., A. M., C. E., Le Roy, Genesee Co., N. Y. *Vertebrates.* Coll.
601. COMSTOCK, J. HENRY, B. Sc., U. S. Entomologist; Entomologist to the U. S. Department of Agric., Washington, D. C. *Economic Entomology.* Coll. Ex.
602. COMSTOCK, THEO. B., Ass't Prof. in charge of Dep't of Geol. and Palæo., Cornell Univ., Ithaca, N. Y. *Geol., Palæo.* Coll. Ex.
603. CONANT, THOMAS, M. D., Pres. Cape Ann Scientific and Literary Association, Gloucester, Mass. *Zoöl., Micros.*

604. CONANT, W. P., Wenham, Mass. *Grasses, Sedges, Ferns.*
605. CONDON, THOS., Prof. Nat. Sci., State Univ., Eugene City, Oregon. *Geol.* Coll. Ex.
606. CONDY, THOMAS, jr., Guelph, Ontario, Can. *Orn.* Coll.
607. CONE, SARAH B., Stockbridge, Mass.
608. CONGDON, J. W., East Greenwich, R. I. *Phæn. Bot., Ferns.* Coll. Ex.
609. CONKLIN, A. M., Las Vegas, New Mexico.
610. CONKLIN, WM. A., Director Central Park Menagerie, New York City. *Mam., Orn., Reptiles.*
611. CONKLIN, W. J., M. D., Dayton, O. *Ent.* Coll. Ex.
612. CONKLING, A. R., Carson City, Nev. *Phys. Geol., Lithol.*
613. CONLEY, J. D., Prof. Nat. Hist., Blackburn Univ., Carlinville, Ill. *Geol., Ent.* Coll. Ex.
614. CONRADI, ADOLPH, Box 4, Bethlehem, Pa. *Ent.* Coll. Ex.
615. CONSTABLE, F. A, 240 Madison Ave., New York City. *Micros.*
616. CONVERSE, Dr. J. H., West Troy, N. Y. *Orn., Gen. Micros.*
617. COOK, Prof. A. J., Agric. Coll., Lansing, Mich. *Zoöl.* Coll. Ex.
618. COOK, I. F., Bellingham, Mass. *Min., Geol.* Coll. Ex.
619. COOK, WILLIAM T., 50 Willow St., Providence, R. I. *Bot., Min., Geol.* Coll. Ex.
620. COOK, W., 141 Eighth St., New York City. *Min., Palæo., Mollusks.*
621. COOKE, CALEB, Peabody Acad. Sci., Salem, Mass. *Invertebrates.*
622. COOKE, WM. E., East Fairmount, Cincinnati, O. *Palæo., Min., Mollusks, Archæo.* Spec.—*Crinoids, Crustacea. Cincinnati Group* specimens in exchange for those of other groups.
623. COOL, Dr. D. M., 45 Egan Ave., Chicago, Ill. *Med. Micros., Gen. Biol.*
624. COON, G. W., 34 Cheshire St., Cleveland, O. *Micros.*
625. COON, Prof. HENRY C., M. D., Alfred Univ., Alfred Centre, N. Y. *Geol.* Coll. Ex.
626. COOPER, EDW. M., 164 Walnut St., Cincinnati, O. *Palæo., Min., Mollusks.* Coll. Ex.
627. COOPER, ELWOOD, Santa Barbara, Cal. *Amateur Botanist, Semi-tropical Fruit Culturist, Forest Trees.*

628. COOPER, Mrs. ELWOOD, Santa Barbara, Cal. *Bot.* Coll. Ex.
629. COOPER, GEO. P., Box 860, Topeka, Kans. *Coleoptera.* Coll. Ex.
630. COOPER, J. C., Topeka, Kans. *Geol.*, *Min.* Coll. Ex.
631. COOPER, J. G., Haywood, Alameda Co., Cal. *Bot.*, *Geol.*, *Vert. Zoöl.*, *Mollusca.*
632. COOPER, WM. A., Santa Cruz, Cal. *Orn.*, *Oöl.*
633. COPE, Prof. EDW. D., 2100 Pine St., Philadelphia, Pa. *Geol.*, *Vert. Palæo.*, *Mam.*, *Orn.*, *Herpetol.*, *Ichth.*, *Osteol.*
634. CORNELL, J. H., 23 Chambers St., N. Y. City. *Micros.*
635. CORSER, D. B., Concord, N. H., *Min.* Coll. Ex.
636. CORSON, ELLWOOD M., M. D., Norristown, Pa. *Phæn.* *Bot.*, *Micros.*
637. CORTHELL, W. G., Tremont Temple, Boston, Mass. *Micros.* Coll. Ex.
638. CORWIN, R. W., M. D., Ann Arbor, Mich. *Comp. Anat. of Vertebrates*, *Micros.*
639. CORY, CHAS. B., 8 Arlington St., Boston, Mass. *Orn.* Coll. Ex.
640. COUCH, EDWARD J., Ridgefield, Conn. *Orn.*, *Ent.* Coll. Ex.
641. COUES, ELLIOTT, Washington, D. C. *Bibliog. of Sci.*, *Gen. Biol.*, *Geog. Distrib.*, *Vert. Emb.*, *Vertebrates.*
642. COUES, G. H., 17 Worcester St., Boston, Mass. *Orn.*
643. COULTER, JOHN M., Prof. Nat. Sci., Hanover, Ind. Editor of "Botanical Gazette." *Bot.*
644. COULTER, M. S., Ed. "Botanical Gazette," Logansport, Ind. *Phæn. Bot.* Coll.
645. COUPER, WM., 83 Bonaventure St., Montreal, Can. *Tax.*, *Ent.*, *Zoöl.*
646. COURTIS, WM. M., A. M. (Harv. Coll., 1864), Mining Engineer, Wyandotte, Mich. *Min.*, *Geol.*, *Bot.* Coll.
647. COUSE, MARY E., 305 Indiana Ave., Indianapolis, Ind. *Bot.*, *Orn.* Coll.
648. COVERT, A. B., L. B. 87, Ann Arbor, Mich. *Orn.*, *Oöl.*, *Mam.*, *Archæo.* Coll.
649. COWDRY, N. H., Dominion Bank, Uxbridge, Ontario, Can.
650. COWLES, EDWARD SHEFFIELD, Ph.D., Farmington, Conn. *Min.*, *Geol.*, *Bot.*
651. COWLES, SAMUEL N., Otisco, N. Y. *Bot.*, *Ent.* Coll. Ex.

652. Cox, C. F., Grand Central Depot, New York. *Micros.*
653. Cox, E. T., State Geologist, Indianapolis, Ind. *Geol.*, *Min.* Coll.
654. Cox, Geo. H., Calumet, Mich. *Min.*, *Crystallog.* Coll. Ex.
655. Cox, Jacob D., Cincinnati, O. *Micros.*, *Gen. Biol.*, *Diatoms.* Coll.
656. Cox, James N., Calumet, Mich. *Minerals, especially Lake Superior.* Coll. Ex.
657. Cox, Judge Joseph, Madisonville, O. *Archæo.*, *Nat. Hist.* Coll.
658. Coxe, Eckley B., Drifton, Jeddo P. O., Luzerne Co., Pa. *Mining Engineer.*
659. Crafts, Samuel D., Box 1229, Boston, Mass. *Orn.* Coll.
660. Cragin, Francis W., 385 Herkimer St., Brooklyn, N. Y. *Gen. Zoöl.: Herpetol.* Coll. Ex.
661. Craig, J. W., M. D., Mansfield, Richland Co., O. *Palæo*, *Archæo.*, *Geol.* Coll.
662. Crandall, A. R., Prof. A. & M. College of Ky., Lexington, Ky. *Geol.*, *Palæo.*, *Bot.*, *Micros.*, *Photo-Micrography.*
663. Crane, Prof. E. H., Colon, Mich. *Anthropol.*, *Vertebrates.* Spec.—*Exploration of Mound-builders' Works.* Coll. Ex.
664. Crannell, Charles E., Factory Yard, Ida Hill, Troy, N. Y. *Orn.*, *Min.*, *Herpetol.*, *Ichth.*, *Worms.* Coll.
665. Crans, James T., Indianapolis, Ind. *N. A. Mollusks.* Coll. Ex.
666. Crapnell, W. B., New Boston, Mercer Co., Ill. *Orn.*, *Tax.*
667. Crary, Rev. B. F., Golden, Jefferson Co., Colo. *Min.* Coll. Ex.
668. Crawford, A. W., Oakland, Cal. *Bot.*, *Palæo.*, *Min.*, *Mollusks.* Coll. Ex.
669. Crawford, J. M., Avondale, Cincinnati, O. *Micros.*, *Coleoptera*, *Lepidoptera.* Coll. Ex.
670. Cresson, Chas. M., M. D., Phila., Pa. *Micros.*
671. Cresson, E. T., Box 31, Phila., Pa. *Hymenoptera.*
672. Cressy, Prof. Noah, M. D., V.S., Amherst, Mass. *Comp. Anat.*, *Archæo.*, *Ethnol.* Coll. Ex.
673. Crevier, I. A., M. D., 336 Craig St., Montreal, Can. *Gen. Nat. Hist.* Coll. Ex.
674. Criss, T. B., Orange, N. J. *Min.*

675. CROFT, CLAYTON I., Fountain, El Paso Co., Colo. *Min.* Coll. Ex.
676. CROOKE, JOHN J., 163 Mulberry St., New York City. *Phæn. Bot., Ferns, Photog., Orn., Coleoptera, Lepidoptera, Mollusks.* Coll.
677. CROSBY, W. D., Beloit, Wis. *Bot., Orn., Ent.* Coll. Ex.
678. CROSBY, W. O., Nat. Hist. Soc., Boston, Mass. *Geol., Invert. Palæo.*
679. CROSIER, Dr. E. S., Louisville, Ky. *Bot., Micros.*
680. Cross, CHAS. W., 3725 Lancaster Ave., Phila., Pa. *Min.*
681. CROW, Prof. D. W., Perryville, Mo. *Bot., Biol., Geol., Min.* Coll.
682. CRUMP, M. H., Ogden Coll., Bowling Green, Ky. *Geol.* Coll. Ex.
683. CULVER, J. O., Madison, Wis. *Micros.*
684. CULVER, W. W., Royalton, Vt. *Geol., Min.* Coll. Ex.
685. CUMMINGS, GEO. J., Meriden, N. H. *Min.; Nat. Hist.: Orn.* Coll. Ex.
686. CUNNINGHAM, SEYMOUR, 28 First St., Troy, N. Y. *Oöl.* Coll. Ex.
687. CURRIER, A. O., Grand Rapids, Mich. *Geol., Min., Mollusks.* Coll.
688. CURRIER, W. O., Providence, R. I. *Min., Geol.* Coll. Ex. Collections made and arranged.
689. CURTIS, Dr. EDWARD, 27 Washington Place, New York City. *Micros.*
690. CURTIS, Dr. JOSIAH, Washington, D. C. *Nat. Hist., Micros.*
691. CURTIS, LESTER, A. B., M. D., Prof. Histology, Chicago Med. College (Medical Dep't North West Univ.), 785 Wabash Ave., Chicago, Ill.- *Histol., Gen. Biol., Micros.*
692. CURTISS, A. H., Jacksonville, Fla. *Bot.* Coll.
693. CURTISS, Mrs. F. A., Jacksonville, Fla. *Marine Algæ.* Coll. Ex.
694. CUSHING, FRANK H., Smithsonian Inst., Washington, D. C. *Archæo., Ethnol.* Coll.
695. CUTHBERT, ALFRED, Trenton, N. J. *Phæn. Bot., Ferns, Orn.* Coll. Ex.
696. CUTLER, E. A., 192 No. Pearl St., Albany, N. Y. *Lepidoptera.* Coll. Ex.

697. CUTLER, Dr. S. P., Pres. Memphis Microscopical Soc., Memphis, Tenn. *Micros.*
698. CUTTER, GEO. R., M. D., N. Y. Eye and Ear Infirmary, N. Y. City. *Micros.*
699. CUTTER, J. C., Box 198, Hanover, N. H. *Micros.*
700. CUTTING, HIRAM A., A. M., M. D., State Geologist, Lunenburg, Essex Co., Vt.; Lecturer on "Applied Science," Norwich Univ., Northfield, Vt. *Micros., Geol.* Coll. Ex.
701. DABNEY, WM. C., Charlotteville, Va. *Micros.*
702. DABOLL, D. A., jr., Centre Groton, Conn. *Bot., Ent.*
703. DAILY, PHIL. M., Utica, Ind. *Geol., Palæo.* Coll.
704. DAKE, Dr. W. C., Nashville, Tenn. *Micros.*
705. DALE, T. NELSON, jr., late Prof. *Geol.* and *Zoöl.*, Drury Coll., Springfield, Mo. Address Paterson, N. J.
706. DALL, WM. H., Ass't U. S. Coast Survey, Smithsonian Inst., Washington, D. C. In charge Coll. Inv. U. S. National Museum. *Malacol., Anthro.* Arctic Shells especially desired in exchange.
707. DALRYMPLE, Rev. E. A., S. T. D., 139 Lanvale St., Baltimore, Md. *Archæo.* Coll.
708. DALTON, JONATHAN C., M. D., New York City. *Micros.*
709. DAME, LORIN L., Medford, Mass. *Bot.* Coll. Ex.
710. DAMON, WILLIAM E. (Author of "Ocean Wonders"), Care of Tiffany & Co., Union Square, New York City. Coll. Ex.
711. DANA, EDWARD S., Ph. D., New Haven, Conn. *Min.: Crystallography.*
712. DANA, JAMES D., Prof. of Min. and Geol., Yale College, New Haven, Conn. *Min., Geol., Crustacea, Corals.*
713. DANFORTH, Dr. I. N., 349 W. Adams St., Chicago, Ill. *Micros.*
714. DANIELS, EMANUEL, Muscatine, Iowa. *Mollusks.* Coll. Ex.
715. DAVENPORT, GEORGE E., Medford, Mass. *Vascular Cryptogams of N. A.* Ex.
716. DAVIDSON, Prof. GEORGE, A. M., Ph.D., U. S. Coast Survey; Member Acad Nat. Sci., San Francisco, Cal. *Phys. Geol., Micros., Ethnol.* Coll. Ex.
717. DAVIDSON, H. M., Ogdensburg, N. Y. *Orn., Tax.* Coll. Ex.
718. DAVIDSON, Mrs. JAMES, Monticello, Jones Co., Iowa. *Geol., Palæo.* Coll. Ex.

719. DAVIDSON, WM. J., Brooklyn, N. Y. *Phæn. Bot.*
720. DAVIE, OLIVER, Taxidermist, 170 No. High St., Columbus, O. *Mam.*, *Orn.* Coll. Ex.
721. DAVIES, JOHN E., A. M., M. D., Sec. Wisconsin Acad. Sci., Box 1106, Madison, Wis.
722. DAVIS, Mrs. ABBIE L., Gloucester, Mass. *Algæ.* Ex.
723. DAVIS, B. T., Chetopa, Kans. *Ent.*
724. DAVIS, E. G., Leominster, Mass. *Orn.*, *Oöl.*, *Min.* Coll.
725. DAVIS, F. H., M. D., Chicago, Ill. *Micros.*
726. DAVIS, F. J., Utica, N. Y. *Orn.*, *Oöl.*, *Tax.* Coll. Ex.
727. DAVIS, G. A., Mexico, N. Y. *Orn.*, *Mam.*, *Reptiles.* Coll. Ex.
728. DAVIS, G. P., M. D., Hartford, Conn. *Phæn. Bot.* Coll. Ex.
729. DAVIS, HENRY, McGregor, Clayton Co., Iowa. *Ferns*, *Mosses*, *Fungi*, *Geol.*, *Min.*, *Archæo.*, *Myriopoda*, *Worms.* Coll. Ex. (*All the kinds of Rock*, *Indian Heads.*)
730. DAVIS, H. WINTER, 227 Market St., Phila., Pa. *Bot.*, *Micros.* Coll. Ex.
731. DAVIS, J. J., Vinton, Benton Co., Iowa. *Bot.* Coll. Ex.
732. DAVIS, LEANDER S., Geological collector, Dayville, Grant Co., Oregon. *Osteol.* Coll.
733. DAVIS, N. S., jr., Evanston, Ill. *Herpetol.*, *Ichth.* Coll. Ex.
734. DAVIS, R. S., M. D., La Centre, Clarke Co., Wash. Terr. *Bot.*, *Orn.* Coll. Ex.
735. DAVIS, WM. J., Louisville, Ky. *Invert. Palæo. Polypi* a specialty. Coll. Ex.
736. DAVIS, WM. M., jr., Cambridge, Mass. *Geol.*
737. DAVISON, Mrs. C. G., Box 111, Louisville, Ky. *Bot.*
738. DAWSON, GEO. M., D. S., Assoc. R. S. M., F. G. S., Ass't Director Geolog. Surv., Montreal, Can. *Geol.*
739. DAWSON, JOHN WILLIAM, LL.D., F. R. S., Principal McGill College, Montreal, Can. *Geol.*, *Palæo.* Coll.
740. DAY, DAVID F., Buffalo, N. Y. *Phæn. Bot.*, *Ferns*, *Horticulture.* Coll. Ex.
741. DAY, E. A., Stockholm, N. J. *Min.*, *Geol.* Coll. Ex.
742. DAY, EDW. C. H., Prof. Normal College, New York City. *Bot.*, *Geol.*
743. DAY, F. H., M. D., Wauwatosa, Wis. *Palæo.*, *Silurian Fossils.* Coll. Ex. for fossils of any age or period.

744. DAYAN, A. J., Lyons Falls, Lewis Co., N. Y. *Orn.*, *Oöl.* Coll. Ex.

745. DEAN, D. V., M. D., St. Louis, Mo. *Bot.*, *Palæo.*, *Micros.*, *Emb.*, *Anthropol.*, *Ent.* Coll.

746. DEANE, O. B., 332 Main St., Springfield, Mass. *Mam.*, *Orn.*, *Reptiles.* Coll. Ex.

747. DEANE, RUTHVEN, Cambridge, Mass.

748. DEANE, WILLIAM, New York City. *Micros.*

749. DEATRICK, Rev. W. WILBERFORCE, Juniata Collegiate Inst., Martinsburg, Blair Co., Pa. *Bot.* Coll. Ex.

750. DEBECK, DAVID, Care of R. Clarke & Co., Cincinnati, O. *Invert. Palæo.*, *Brachiopoda.* Coll. Ex.

751. DECAMP, WM. H., M. D., Grand Rapids, Mich. *Con.*, *Min.* Coll. Ex.

752. DEECKE, THEODORE, Special pathologist, New York State Lunatic Asylum, Utica, N. Y. *Normal and pathological Anatomy, Histology and Histo-chemistry.*

753. DEGARMO, JAMES M., Ph.D., Rhinebeck, Dutchess Co., N. Y. *Orn.*, *Lepidoptera.* Coll. Ex.

754. DELAND, L. J., Freeport, N. Y. *Micros.*

755. DEMEREST, JOHN M., Newton, Sussex Co., N. J. *Nat. Hist.: Oöl.*, *Ent.*, *Orn.* Coll. Ex.

756. DENISON, CHARLES H., Box 2010, San Francisco, Cal. *Min.* (Furnishes mineralogical slides for microscopists.) Coll. Ex.

757. DENNIS, Prof. DAVID, Wilmington, O. *Invert. Palæo.*, *Min.* Coll. Ex. Lower Silurian Fossils of Cin. Group for specimens in Palæo., Bot., and Zoöl.

758. DENNIS, S. W., 33 Kearney St., San Francisco, Cal. *Micros.*

759. DENSLOW, Rev. HERBERT M., New Haven, Conn. *Bot.: Orchids, Ferns.* Coll. Ex.

760. DENTON, JOHN M., London, Ontario, Can. *Ent.* Coll.

761. DENTON, SHELLEY W., Wellesley, Mass. *Orn.*, *Oöl.*, *Ent.* Coll. Ex.

762. DERBY, C. W., Twin Lakes (*via* Granite), Lake Co., Colo. *Orn.*

763. DERBY, O. A., Cornell Univ, Ithaca, N. Y. (Absent in Brazil.) *Geol.*

764. DESSAN, S., 83 William St., New York City. *Min.* Coll.

765. DEVEREAUX, W. L., Clyde, Wayne Co., N. Y. *Ent.: Coleoptera, Lepidoptera.* Coll. Ex.

766. DEWEY, ALVIN H., Watertown, Jefferson Co., N. Y. *Min.*, *Geol.* Coll. Ex.

767. DEWOLF, GEORGE N., Garnett, Kans. *Invert. Palæo.*, *Orn.* Coll. Ex.

768. DEXTER, NEWTON, Providence, R. I. *Orn.*

769. DEXTER, Dr. RANSOM, 1415 Indiana Ave., Chicago, Ill. *Zoöl.*, *Micros.*

770. DICKEL, GEORGE, Louisville, Ky. *Tax.*, *Coleoptera*, *Lepidoptera.* Coll. Ex.

771. DICKERSON, EDWARD N., New York City. *Micros.*

772. DICKINSON, D. B., Chatham, N. J. *Tax.*, *Orn.*, *Oöl.* Coll. Ex.

773. DICKINSON, E., 73 Spring St., Springfield, Mass. *Orn.*, *Oöl.*, *Gen. Biol.* Coll.

774. DICKINSON, G. K., M. D., Jersey City, N. J. *Sanitary Science.*

775. DICKINSON, I. L., Shaw's Flat, Tuolumne Co., Cal. *Min.*, *Oöl.* of Cal., *Land*, *Marine and F. W. Shells.* Coll. Ex.

776. DICKINSON, T. A., Sup't Cabinet Nat. Hist. Soc., Worcester, Mass. General exchange of Natural History of Mass.

777. DICKINSON, Mrs. W. P., Dubuque, Iowa. *Phæn. Bot.*, *Crypt. Bot.*, *Geol.* Coll.

778. DIETZ, WM. G., Hazleton, Luzerne Co., Pa. *Ent.: Coleoptera.* Coll. Ex.

779. DILLER, J. SILAS, Cambridge, Mass. *Geol.*, *Min.*

780. DIMMICK, L. N., M. D., Santa Barbara, Cal. *Algæ*, *Archæo.*, *Mollusks:* Coll.

781. DIMMOCK, GEORGE, Cambridge, Mass. *Coleoptera*, *Gen. Zoöl.* Coll.

782. DINWIDDIE, ROB'T, 113 Water St., New York City. *Algæ*, *Desmids*, *Diatoms*, *Micros.*, *Protozoa*, *Infusoria.*

783. DIXON, GEORGE, Hampton, Va. *Bot.*, *Con.: British Land and Fresh Water and Marine Shells.* Ex.

784. DIXWELL, JOHN, A. B., M. D., Member Boston Nat. Hist. Soc., 6 Pemberton Sq., Boston, Mass. *Osteol.* Coll. Ex.

785. DOAN, ABEL, Westfield, Ind. *Phæn. Bot.*, *Geol.* Coll. Ex. specimens of woods.

786. DOBBIN, GEO. W., Baltimore, Md. *Gen. Nat. Hist.*, *Micros.*

787. DODD, ALICE, Williamstown, Mass. *Orn.*

788. DODGE, CHARLES R., 1228 N St. N. W., Washington, D. C. *Economic Entomology.* Coll.
789. DODGE, E. A., Glencoe, Dodge Co., Neb. *Ent., Floriculture.* Coll. Ex.
790. DODGE, G. M., Glencoe, Dodge Co., Neb. *Lepidoptera, Orthoptera.* Coll. Ex.
791. DOLBEAR, A. E., College Hill, Mass. *Micros.*
792. DOLL, JACOB, 74 Graham Ave., Brooklyn, N. Y. *Lepidoptera.* Coll. Ex.
793. DOLPH, JOHN M., A. M., Port Jervis, N. Y. *Bot., Min., Palæo., Lepidoptera.* Coll. Ex.
794. DONALDSON, HENRY H., New Haven, Conn. *Micros., Bot.; Ent.: Lepidoptera.* Coll. Ex.
795. DORRANCE, CHAS. E., Scotts, Kalamazoo Co., Mich. *Ent.: Lepidoptera; Orn., Tax.* Ex.
796. DORSCH, EDWARD, M. D., Monroe, Mich. *Gen. Bot., Ent., Palæo., Anthro., Crustacea.* Coll.
797. DOTON, HOSEA, A. M., Woodstock, Vt. *Geol., Phys Geog.*
798. DOUGHERTY, L. C., Licking, Ill.
799. DOUGHERTY, WM., Quincy, Ill.
800. DOUGLASS, WALTER, Mt. Auburn, Cincinnati, O. *Orn., Oöl., Ent.* Coll. Ex.
801. DOWNES, ANDREW, Halifax, N. S. *Orn.*
802. DOWNS, C. A., Lebanon, N. H. *Min., Geol., Orn.* Coll.
803. DOWNS, C. A., jr., Lebanon, N. H. *Orn., Tax.*
804. DREW, FRANK, Denver, Colo. *Orn., Osteol.* Coll.
805. DRYER, CHAS. R., M. D., Fort Wayne, Ind. *Micros., Biol.*
806. DRYER, CLARENCE M., Lawrence, Mass. *Orn.*
807. DUDDLESTON, Jos. J., Frankfort, Herkimer Co., N. Y. *Geol.*
808. DUDLEY, P. H., 155 Erie St., Cleveland, O. *Micros.*
809. DUDLEY, WM. R., Ass't Prof. of *Botany*, Cornell Univ., Ithaca, N. Y.
810. DUEMLING, Prof. H., Ph.D., Concordia Coll., Fort Wayne, Ind. *Zoöl.* Coll. Ex.
811. DUFFIELD, SAMUEL P., M. D., Detroit, Mich. *Micros.*
812. DUFRESNE, D. O. R., Chicoutimi, Quebec, Can. *Bot., Ent.* Coll. Ex.
813. DUNBAR, J. B., Topeka, Kans. *Anthro.* Coll.
814. DUNLAP, J. N., M. D., Miami, Saline Co., Mo. *Geol., Palæo., Min., Archæo., Bot.* Coll. Ex.

815. DUNLOP, W. W., Box 525, Montreal, Can. *Orn., Oöl.*
816. DUNN, G. W., 317 Washington St., San Francisco, Cal. *Bot., Coleoptera, Con.*
817. DUPRE, Col. L. J., Austin, Tex. *Am. Archæo.*
818. DURAND, WILLIAM S., Marshall, Mich. *Oöl., Orn.* Coll. Ex.
819. DURFEE, C. A., Editor "Leisure Hour," Brattleboro, Vt. *Geol., Min.* Coll. Ex.
820. DURFEE, T. C., 44 Sabin St., Providence, R. I. *Geol., Min.* Coll. Ex.
821. DUSHANE, JAMES, South Bend, Ind. *Ent.* Coll. Ex.
822. DUTTON, Capt. C. E., U. S. A., Ordnance Corps, War Department, Washington, D. C. *Structural and Dynamical Geology.*
823. DWELLY, GEO., So. Abington, Mass. *Tax.* Coll. Ex.
824. DWIGHT, CHAS. E., Wheeling, W. Va. *Geol., Min.*
825. DYER, ALPHEUS, Troy, N. Y. *Micros.* Coll. Ex.
826. DYER, C. B., Mt. Harrison, Cincinnati, O. *Geol., Palæo.*
827. DYKEMAN, B. J., So. Haven, Mich. *Geol., Min., Archæo., Fossils.* Coll. Ex.
828. EAGER, W. W., West Newton, Mass. *Orn., Oöl.* Coll.
829. EAGLE, C. A., 129 E. 30th St., New York City. *Orn., Oöl.* Coll. Ex.
830. EARLE, CHAS., 126 E. 16th St., New York City. *Orn.* Coll. Ex.
831. EARLE, CHAS. F., 1 Empire Block, Syracuse, N. Y. *Orn., Con., Geol.* Coll. Ex.
832. EARLE, F. S. Cobden, Union Co., Ill. *Crypt. Bot.*
833. EARLE, HENRY, jr., Montreal, Can. *Ent.: Lepidoptera.*
834. EASTWOOD, J. F., Prof. of Nat. Sci., Bethany, W. Va. Coll. Ex.
835. EATON, A. K., 65 Henry St., Brooklyn, N. Y. *Micros.*
836. EATON, DANIEL C., Prof. Bot., Yale Coll., New Haven, Conn. *Ferns and Marine Algæ.* Coll.
837. EATON, DARWIN G., Ph.D., Prof. Phys. Sci., Packer Inst., Brooklyn, N. Y. *Geol.* Coll. Ex.
838. EATON, D. H., Peotone, Ill. *Orn., Oöl., Tax., Ent.* Coll. Ex.
839. EATON, HORACE, Quincy, Mass. *Horticulture.*
840. EATON, Prof. T. E. N., Worcester, Mass. *Bot.* Exchanges desired in *Filices, Gramineæ, Cyperaceæ.*
841. EBERSOL, D. S., Sec. Acad. Nat. Sci, Ottawa, Ill. *Geol., Archæo.* Coll. Ex.

842. ECKFELDT, JOHN W., M. D., 65th and Vine Sts., Phila., Pa. *Phæn.Bot.; Crypt.Bot.: Ferns, Mosses, Lichens.* Coll. Ex.
843. EDDY, A. H., 57 Sigorney St., Hartford, Conn. *Min., Micros.* Coll. Ex.
844. EDDY, CHARLES W., Ware, Mass. *Orn.* Coll.
845. EDDY, Rev. E. B., 219 Prairie Ave., Providence, R. I. *Geol., Min., Metall., Anthro.* Coll. Ex.
846. EDDY, NEWELL A., 89 State St., Bangor, Me. *Orn., Oöl.* Coll. Ex.
847. EDMAN, J. A., Meadow Valley, Plumas Co., Cal. *Min., Geol.* Coll. Ex.
848. EDMUNDS, E. S., Lock Drawer 72, La Grange, Ind. *Geol.* Coll.
849. EDWARDS, E. J., Galesburg, Ill. *Ent.* Coll.
850. EDWARDS, HENRY, Boston Theatre, Boston, Mass. *Ent.: Lepidoptera of N. A. and of the World. Insects of all orders.*
851. EDWARDS, Prof. J. BAKER, Montreal, Can. *Micros.*
852. EDWARDS, J. WARNER, Phila., Pa. (Now in Freiburg, Germany.) *Geol., Min.*
853. EDWARDS, JOSEPH W., M. D., Mendota, Ill. *Micros., Bot., Morphological and Physiological Histology.* Ex.
854. EDWARDS, Mrs. MARY J., Galesburg, Ill. *Bot.: Algæ.*
855. EDWARDS, WM. H., Coalburgh, W. Va. *Diurnal Lepidoptera of N. A.* Coll. Ex.
856. EGAN, W. C., 216 So. Morgan St., Chicago, Ill. *Geol., Palæo.* Coll. Ex.
857. EGGERT, H., 918 Wash St., St. Louis, Mo. *Phæn. Bot., Ferns.* Coll. Ex.
858. EGLESTON, T., Prof. of Min., School of Mines, Columbia College, New York City. *Min., Metall.* Coll. Ex.
859. EHINGER, GEO. E., M. D., Keokuk, Iowa. *Phæn.Bot., Ferns, Mosses.* Coll. Ex.
860. EISEN, Dr. GUSTAF, Fresno, Cal. *Zoöl.: Oligochæta, Myriopoda, Arachnida.* Coll. Ex.
861. ELLIOTT, A. F., M. D., Minneapolis, Minn. *Min., Con.* Coll. Ex.
862. ELLIOTT, DANIEL G., New Brighton, Staten Island, N. Y. *Orn., Mam.*
863. ELLIOTT, GEORGE S., Edgar, Obion Co., Tenn. *Geol.*
864. ELLIOTT, JNO. B., M. D., Univ. of the South, Sewanee, Tenn. *Geol.* Coll. Ex.

865. ELLIOTT, M., jr., Rome, Pa. *Phæn.Bot., Orn.: Ent.: Lepidoptera.* Coll. Ex.
866. ELLIS, I. WALTER, F. S. S., N. B. A., and Corresponding Member R. S., England. *Geol.*
867. ELLIS, J. B., Newfield, N. J. *Ascomycetous Fungi.* Coll. Ex.
868. ELLS, R. W., M. A., Geolog. Surv., Montreal, Can. *Geol., Lithol.* Coll.
869. ELLSWORTH, E. W., East Windsor Hill, Conn. *Oöl., Indian Relics.* Coll.
870. ELMORE, SAMUEL E., Hartford, Conn. *Bot., Orn.*
871. ELSBERG, LOUIS, M. D., 614 Fifth Ave., New York City. *Micros.*
872. ELSNER, JOHN, M. D., Denver, Colo. *Bot., Palæo., Geol., Min., Micros.* Coll. Ex.
873. EMERIC, H. F., San Francisco, Cal. *Orn.*
874. EMERICHS, F. J., New York City. *Micros.*
875. EMERSON, Dr. N. B., 53 W. 28th St., New York City. *Micros.*
876. EMERTON, JAMES H., Salem, Mass. *Arachnids.*
877. EMMONS, S. F., F. G. S., Box 2218, Cheyenne, Wyoming Terr. *Geol., Lithol.*
878. ENGELMANN, GEO., M. D., 3003 Locust St., St. Louis, Mo. *Bot.* Coll.
879. ENGELMANN, GEO. J., M. D., 3003 Locust St., St. Louis, Mo. *Micros., Archæo.*
880. ENGLISH, Dr. D. C., New Brunswick, N. J. *Micros.*
881. ENSIGN, WILLIAM O., M. D., Rutland, La Salle Co., Ill. *Micros., Gen.Biol., Osteol.*
882. ESCHMANN, P. W. R., Pharmacist, 115 East Market St., Louisville, Ky. *Bot.* Coll. Ex.
883. ESTABROOK, S. A., Box 943, Worcester, Mass. *Bot.: Ferns.* Coll. Ex.
884. ESTES, D. C., D. D. S., Lake City, Wabasha Co., Minn. *Geol.; Gen. Nat. Hist.: Orn., Ichth.* Coll. Ex.
885. EUGELS, FREDERICK H., M. D., 72 South C St., P. O. Box 518, Virginia City, Nev. *Micros., Comp.Anat., Histology (Diatoms).* Coll. Ex.
886. EVANS, JOHN D., Belleville, Ontario, Can. *Micros., Ent.* Coll. Ex.
887. EVANS, S. G., Evansville, Ind. *Ent.: Lepidoptera.* Coll. Ex.
888. EVARTS, HERMAN C., M. D., Frankford, Phila., Pa. *Gen.Nat. Sci.* Spec. — *Biol., Zöol.*

889. EVE, Dr. DUNCAN, Nashville, Tenn. *Micros.*
890. EVEN, JOSEPH, Peru, Ill. *Fossil Flora.* Coll.
891. EVERETT, M. H., M. D., Troy Grove, Ill. *Archæo., Geol.* Coll.
892. EVERETT, OLIVER, M. D., Dixon, Ill. *Phæn.Bot., Ferns, Mosses, Palæo.* Coll. Ex. Western plants and Trenton fossils in exchange.
893. EVERMANN, B. W., Teacher of Nat. Sci., Camden, Carroll Co., Ind. *Orn., Ichth., Mollusks, Phæn. Bot., Mam.* Coll. Ex.
894. EVERTS, ORPHEUS, Indianapolis, Ind. *Micros.*
895. EWART, JOHN G., Yorker P. O., Addington Co., Ontario, Can. *Mam., Orn., Lepidoptera, Coleoptera, Oöl.* Coll. Ex.
896. FAIRBANKS, FRANKLIN, St. Johnsbury, Vt. *Min., Orn.*
897. FAIRBANKS, Rev. HENRY, St. Johnsbury, Vt. *Orn., Oöl.*
898. FAIRCHILD, DAVID S., M. D., Ames, Iowa. *Micros., Gen. Biol.*
899. FAIRCHILD, HERMAN L., 20 East 42nd St., New York City. *Palæo., Geol.* Coll. Ex.
900. FAIREY, RICHARD, Chatham, N. B. *Hymenoptera, Lepidoptera, Diptera, Coleoptera.* Coll.
901. FALES, J. C., Prof. of Nat. Sci., Centre Coll., Danville, Ky. *Geol., Zöol.* Coll. Ex.
902. FARGO, JAMES F., 56 Park Ave., New York City. *Min.* Ex.
903. FARLOW, W. G., Prof. of Bot., Harvard Coll., Cambridge, Mass. *Fungi, Algæ.* Coll.
904. FARNELL, WILLIAM, Jacksonville, Fla. *Ferns, Algæ, Infusoria.* Coll. Ex.
905. FARNSWORTH, P. J., M. D., Clinton, Iowa. *Invert. Palæo., Geol., Archæo.* Coll. Ex.
906. FARQUHARSON, ROBERT JAMES, M. D., Davenport, Iowa. *Anthro., Archæo.*
907. FARRAND, KATE E., La Porte, Ind. *Ent., Oöl.* Coll. Ex.
908. FAUGHT, V. R., Elvaston, Ill. *Geol., Orn., Ent.* Coll.
909. FAXON, CHARLES E., Boston, Mass. *Bot.*
910. FAXON, WALTER, Instructor in Zoöl., Harvard Univ.; Ass't Mus. Comp. Zoöl., Cambridge, Mass. *Gen. Zoöl., Crustacea.*
911. FEARING, C. W., A. B., So. Weymouth, Mass. *Min., Crystallog., Lithol.* Coll. Ex. Mineralogical Cabinets arranged.

912. FEATHERSTONE, J. E., Elk River, Sherburne Co., Minn. *Micros.*
913. FEBIGER, CHRISTIAN, Wilmington, Del. *Diatomaceæ.*
914. FEHR, CARL, San Francisco, Cal. *Coleoptera, Lepidoptera.*
915. FELCH, Miss GERTRUDE C., North Sutton, N. H. *Tax., Geol., Orn., Oöl.* Coll. Ex.
916. FELL, GEO. E., 162 Prospect Ave., Buffalo, N. Y. *Micros.*
917. FELLOWS, CHARLES S., Fairbanks, Alachua Co. Fla. *Diatoms, Desmids, Algæ* (Fresh Water), *Microscopic Crustacea aud Infusoria.* Coll.
918. FERGUS, KENNETH L.D., West Chester, Pa. *Bot., Ent., Orn., Mollusks, Infusoria.* Coll.
919. FERGUSON, D. W., 157-159 Hester St., N. Y. City. *Mollusks, Radiates.* Coll. Ex.
920. FERGUSON, Maj. T. B., Baltimore, Md. *Fish Culture.*
921. FERNALD, Prof. C. H., State Coll., Orono, Me. *Gen. Nat. Hist.* Coll. *Tortricidæ of the World.* Ex.
922. FERRISS, F. E., Painesville, Lake Co., O. *Geol.*
923. FERRISS, J. E., Painesville, O. *Bot.*
924. FEWKES, A. H., Newton Highlands, Mass. *Hymenoptera, Botany.* Coll.
925. FEWKES, JESSE, Newton, Mass. *Vert. Anat.*
926. FISH, CHAS., Oldtown, Me. *Ent.: Lepidoptera.* Coll. Ex. Desires N. A. Pterophoridæ.
927. FISH, GEORGE T., 42 Arcade, Rochester, N. Y. *Phæn. Bot., Ferns.* Coll. Ex.
928. FISHER, A. K., M. D., Sing Sing, N. Y. *Orn., Oöl., Lepidoptera.* Coll.
929. FISHER, F. G., Mulberry, O. *Palæo., Min.* Coll. Ex.
930. FISHER, J. H., 106 Mt. Hope Ave., Rochester, N. Y. *Micros.*
931. FISHER, Rev. J. MAYHEW, Ingonish, Cape Breton, N. S. *Mollusks.*
932. FISHER, Miss MARY, Chillicothe, Ill. *Phæn. Bot.; Crypt. Bot.: Ferns.* Coll. Ex.
933. FITCH, ASA, M. D. (late N. Y. State Entomologist), Salem, Washington Co., N. Y. *Bot., Ent.*
934. FITCH, E. H., Editor "Journal of Science;" Sec'y Society of Nat. Sci., Toledo, O. *Orn., Oöl.* Ex.
935. FITCH, T. T., Box 393, San Francisco, Cal. *Micros.*
936. FLAGG, BERNARD WHITMAN, A. M., 10 Concord Ave., Cambridge, Mass. *Bot., Gen. Biol.*

937. FLANDERS, Mrs. G. H., Mc Gregor, Iowa. *Min.*, *Fossils.* Coll. Ex.
938. FLANNER, THOS. U., A. M., M. D., Springfield, Mo. *Micros.*, *Diatomaceæ.* Coll. Ex.
939. FLETCHER, Mrs. FRANK A., 919 Hawthorn Ave., Minneapolis, Minn. *Min.* Coll. Ex.
940. FLETCHER, HUGH, B. A., Geolog. Surv., Montreal, Can. *Geol.*
941. FLETCHER, J., Ottawa, Can. *Bot.*, *Ent.*
942. FLINT, Mrs. C. C., Winchester, N. H. *Ent.* Ex.
943. FLINT, MARIHA BOCKEE, A. M., Shelbyville, Ky. *Bot.*, *Geol.* Coll. Ex.
944. FLINT, WM. F., Winchester, N. H. *Bot.* Coll. Ex.
945. FLOOD, MILTON J., Bolton, Mass. *Tax.*, *Gen. Nat. Hist.* Coll. Ex.
946. FLORER, T. W., Waxahachie, Ellis Co., Tex. *Orn.* Ex.
947. FOLEY, CHAS., Lindsay, Ontario, Can. *Orn.*, *Oöl.*, *Tax.* Coll. Ex.
948. FOLLETT, DANIEL A., Diamond Hill, Cumberland, R. I. *Min.* Coll. Ex.
949. FONTAINE, WM. M., Prof. of Geol. and Nat. Hist., University of Virginia, Albemarle Co., Va. *Geol.*, *Bot.*, *Palæo.*
950. FONTARIVE, EMILE, Boston, Mass. *Micros.*
951. FOOTE, A. E., M. D., Prof. of Min., 1223 Belmont Ave., Phila., Pa. *Min.*, *Bibliog.*, *Gen. Nat. Hist.* Coll. Ex.
952. FOOTE, LEWIS, C. E., 39 Detroit St. W., Detroit, Mich. *Bot.*
953. FORBES, Prof. S. A., Director Ill. State Lab. of Nat. Hist., Normal, Ill. *Zoöl.: Crustacea of U. S.* Coll. Ex.
954. FORBUSH, EDWARD H., 196 Union St., Worcester, Mass. *Orn.*, *Mam.* Coll.
955. FORD, CHAS. H., Prof. of Nat. Sci., State Normal School, Kirksville, Mo. *Bot.* Spec.—*Asters*, *Solidagos*, *Orchidaceæ*, *Filices.* Coll. Syrian Plants in exchange for Southern or Western.
656. FORD, H. C., Box 269, Santa Barbara, Cal. *Ferns*, *Algæ*, *Invert. Palæo.*, *Archæo.*, *Con.* Coll. Ex.
657. FOREHAND, FREDERICK, Box 803, Worcester, Mass. *Orn.*, *Oöl.* Coll. Ex.
658. FOREMAN, Dr. E., Smithsonian Inst., Washington, D. C.

959. FORMANN, J. B., 1150 So. 7th St., St. Louis, Mo. *Coleoptera, Lepidoptera.*
960. FORSTER, T. F., Norristown, Pa. *Gen.Bot.* Coll. Ex.
961. FOSTER, Rev. ELON, Middletown, Conn. *Bot.*
962. FOSTER, GRANVILLE F., Prof. of Physiol., So. Illinois Normal Univ., Carbondale, Ill. *Anat., Physiol.*
963. FOWLER, AUGUSTUS, Danvers, Mass. *Oöl.*
964. FOWLER, H. G., Auburn, N. Y. *Orn.* Coll. Ex.
965. FOWLER, JAMES, A. M, Instructor in Nat. Sci., Provincial Normal School, Frederickton, N. B. *Bot.* Coll. Ex.
966. FOWLER, SAMUEL P., Danvers, Mass. *Orn.*
967. FOX, SAMUEL L., 924 Chestnut St., Phila., Pa. *Micros., Ent.*
968. FRADENBURGH, Rev J. N., A. M., Ph.D., Franklin, Venango Co., Pa. *Anthropol., Bot., Geol.* Coll.
969. FRAINE, T. W., 13 Joslyn Park, Rochester, N. Y. *Tax.* Coll.
970. FRANCIS, GEORGE E., M. D., 8 Elm St., Worcester, Mass. *Bot., Horticulture.*
971. FRANCK, GEO., 123 W. Houston St., New York City. *Lepidoptera.* Coll. Ex.
972. FRANKLIN, G. S., A.M., M. D., Chillicothe, O. *Ent., Archæo.* Coll. in *Archæo.*
973. FRANKLIN, WM. E., M. D., La Grange, Fayette Co., Tenn. *Bot., Ent.*
974. FRAZER, PERSIFOR, jr., Ass't Geolog. Surv., 917 Clinton St., Phila., Pa. *Geol., Lithol., Min., Micros.*
975. FRAZIER, B. W., Prof. of Mining and Metallurgy, Bethlehem, Pa. *Min., Metall.* Coll. Ex.
976. FRAZIER, J. V., M. D., Viola, Mercer Co., Ill. *Palæo., Geol.* Coll.
977. FREE, REV. ALFRED, Phila., Pa. *Phæn.Bot., Min.* Coll. Ex.
978. FREEDLEY, G. H., 122 So. 19th St., Phila., Pa. *Orn.* Coll. Ex.
979. FREEDLEY, W. G., 210 So. 24th St., Phila., Pa. *Orn., Oöl.* Coll. Ex.
980. FREEMAN, H. C., C.E., E. M., Alto Pass, Union Co., Ill. *Geol., Metall.* Coll.
981. FRENCH, G. H., Mus. of So. Illinois Normal University, Carbondale, Ill. *Bot; Ent.: Noctuidæ.* Coll. Ex.
982. FREY, JOHN, Bellevue Hospital, New York City. *Micros.* Coll. Ex.

983. FRIES, ALEX. P, St. Nicholas, Fla. *Bot.* Ex.
984. FRIES, GEO. W., Friendship, N. Y. *Micros.*
985. FRITZ-GAERTNER, Dr. M. R., Albany, N. Y. *Micros.*
986. FROST, CHARLES C., Brattleboro, Vt. *Crypt. Bot.* Coll.
987. FUCHS, C., 14 Bond St., N. Y. City. *Coleoptera.* Coll. Ex.
988. FULLER, A. N., Hermosa, La Plata Co., Colo. *Geol., Zoöl.* Coll.
989. FULLER, A. S., Ridgewood, N. J. *Phæn. Bot., Coleoptera.* Coll. Ex.
990. FULLER, C. B., Portland, Me. *Zoöl.*
991. FULLER, Mrs. C. E., Needham, Mass. *Crypt. Bot.: Mosses; Orn.*
992. FULLER, C. G., 90 Washington St., Chicago, Ill. *Micros., Histol., Gen. Biol.* Coll. Ex.
993. FULLER, CHARLES H., Woodhaven, Queens Co., L. I., N. Y. *Phæn. Bot.* Coll. Ex.
994. FULLER, FRANK H., Needham, Mass. *Coleoptera, Lepidoptera.* Coll.
995. FULLER, JOSEPH B., Rochester, N. Y. *Bot.*
996. FULLER, L. A., Springfield, Ill. *Geol., Invert. Palæo.* Coll.
997. FULLER, W. S., M. D., 15 1-2 Main St., Fairport, Monroe Co., N. Y. *Pathological Histology, Zoöl.* Coll. Ex.
998. FULLERTON, J. A., Taxidermist, Rutherford Park, Bergen Co., N. J. *Orn., Oöl.* Coll.
999. GADE, GEO., Fordham Station, New York City. *Diurnal Lepidoptera, Micros.* Coll.
1000. GAGE, S. H., B. S., Inst. in Micros. and Prac. Phys., Cornell Univ., Ithaca, N. Y. *Comp. Anat. of Vert.*
1001. GAILLARD, EDWARD, Ph. G., Eleventh & Montgomery Ave., Phila., Pa. *Micros.*
1002. GAINES, MARSHALL R., A.M., Litchfield, Conn. *Min., Geol.* Coll. Ex.
1003. GALEN, JAMES, Rawlinsville, Lancaster Co., Pa. *Bot., Geol., Min., Orn., Oöl., Emb., Archæo.* Coll. Ex.
1004. GALLOWAY, G. W., jr., M. D., Findlay, Hancock Co., O. *Bot., Archæo., Mollusks.* Coll.
1005. GANNETT, HENRY, U. S. Geol. Surv., Le Droit Park, Washington, D. C. *Phys. Geog.*
1006. GARBER, A. P., M. D., Columbia, Pa. *Bot.*

1007. GARDINER, Prof. E. S., Madison Univ., Hamilton, N. Y. *Phæn. Bot., Ferns, Micros.*

1008. GARDINER, FREDERIC, Cambridge, Mass. *Geol., Herpetol., Coleoptera, Lepidoptera.* Coll. Ex.

1009. GARDINER, Rev. F., D. D., Pres. Sci. Assoc., Middletown, Conn.

1010. GARDNER, JOSEPH, Radford, Ill. *Micros.*

1011. GARMAN, SAMUEL, Naturalist. Special studies: — *Herpetol., Ichth.* Cambridge, Mass. (Care Mus. Comp. Zoöl.)

1012. GARMAN, W. H., Normal, Ill. *Ent.*

1013. GARNIER, JOHN H., M. D., Lucknow, Ont., Canada. *Reptilia.* Coll. Ex. Tulips, Lilies, Hyacinths and other bulbs for exchange.

1014. GARRETT, HENRY, White Horse, Chester Co., Pa. *Orn., Oöl., Min., Nat. Hist.* Coll. Ex.

1015. GARRISH, J. R., M. D., 40 W. 21st St. N. Y. City. *Micros.*

1016. GARRISON, O. E., C. E., St. Cloud, Stearns Co., Minn. *Bot., Geol.* Coll. Ex.

1017. GARVER, Rev. AUSTIN S., Greenwood, Mass. *Phæn. Bot., Ferns, Ent.* Coll. Ex.

1018. GASTMAN, E. A., Decatur, Ill. *Ent.* Coll. Ex.

1019. GATTINGER, AUGUST, M. D., Nashville, Tenn. *Bot.* Coll. Ex.

1020. GAUMER, GEO. F., Box 979, Lawrence, Kans. *Gen. Ent.: Diptera; Reptiles, Amphibians.* Coll. Ex.

1021. GAY, FRED A., 173 Westminster St., Providence, R. I. *Min.* Coll. Ex.

1022. GAYLORD, HENRY C., 110 Public Square, Cleveland, Ohio. *Micros.*

1023. GEDDES, GAMBLE, Millbrook, Ontario, Can. *Ent.: Lepidoptera.* Coll. Ex.

1024. GEHRING, J. GEORGE, 397 Pearl St., Cleveland, O. *Ent.: Coleoptera of U. S.*

1025. GENTH, F. A., W. Phila., Pa. *Min., Geol.* Coll. Ex.

1026. GENTRY, THOS. G., Germantown, Phila., Pa. *Phæn. Bot., Orn., Archæo., Ethnol., Arachnida.* Coll. Ex.

1027. GERARD, CHAS. B, C. E., Anderson, Ind. *Phæn. Bot.* Coll.

1028. GERARD, WM. R., 9 Waverly Place, New York City. *Crypt. Bot.: Fungi.*

1029. GERARD, W. R., Poughkeepsie, N. Y. *Micros.*

1030. GERBER, ANDREW M., Box 205, Columbia, Pa. *Bot.* Ex.

1031. GEREND, JOHN, Sheboygan, Wis. *Orn.*, *Oöl.*, *Lepidoptera*, *Herpetol.* Coll. Ex.

1032. GERNERD, J. M. M., Muncy, Pa. *Min.*, *Con.*, *Palæo.*, *Archæo.* Coll.

1033. GERNERD, JAMES W., Alburtis, Lehigh Co., Pa. *Orn.*, *Archæo.*, *Min.* Coll. Ex.

1034. GERNERD, WILSON, Trexlertown, Lehigh Co., Pa. *Min.*, *Orn.* Coll. Ex.

1035. GESNER, WM., M. D., Birmingham, Jefferson Co., Ala. *Min.*, *Geol.*

1036. GIAUQUE, FLORIEN, Esq., Johnston Building, Cincinnati, Ohio. *Am. Archæology.* Coll. Ex.

1037. GIBBES, LEWIS R., Charleston, S. C. *Zoöl.*

1038. GIBBS MORRIS, M. D., Kalamazoo, Mich. *Orn.*, *Oöl.*, *Herpetol.* Ex.

1039. GIBBS, PHIL. H., Guelph, Ontario, Can. *Mam.*, *Orn.*, *Ichth.* Coll. Ex.

1040. GIBBS, WM., Medford, Mass. *Orn.*, *Oöl.*, *Min.*, *Archæo.* Coll. Ex.

1041. GIBSON, WM., Newport, Ind. *Geol.*, *Palæo.*, *Archæo.* Coll. Ex.

1042. GIFFORD, Mrs. HENRY S., 44 Montgomery St., Syracuse, N. Y. *Bot.: Filices.* Coll. Ex.

1043. GIFFORD, WM., Alta, Peoria Co., Ill. *Palæo.*, *Geol.* Coll. Ex.

1044. GILBERT, BENJAMIN D., Utica, N. Y. *Bot.: Native and Foreign Ferns.* Coll. Ex.

1045. GILBERT, CHAS. H., Inst. in Zoöl., Butler Univ., Irvington, Ind. *Bot.*, *Orn.*, *Ichth.* Coll. Ex. in *Orn.* and *Ichth.*

1046. GILBERT, DEXTER W., Keene, N. H. *Bot.*, *Geol.*, *Min.*, *Anthro.* Coll. Ex.

1047. GILBERT, ELIZA J. C., Keene, N. H. *Phæn. Bot.*, *Ferns*, *Horticulture.* Coll.

1048. GILBERT, GEORGE H., Keene, N. H. *Geol.*, *Min.* Coll.

1049. GILBERT, G. K., Box 806, Washington, D. C. *Geol.*

1050. GILBERT, JOHN B., Penn Yan, Yates Co., N. Y. *Orn.* Coll. Ex.

1051. GILL, THEO., M. D., Ph.D., Smithsonian Inst., Washington, D. C. *Palæo.*, *Bibliog. of Sci.*, *Gen. Biol.*, *Mam.*, *Ichth.*, *Osteol.*, *Mollusks.* Coll.

1052. GILL, WILLIAM L., Lancaster, Pa. *Palæo.*, *Geol.*, Coll.
1053. GILLET, EDWARD, Southwick, Mass. *Botany: Native Plants.* Coll. Ex.
1054. GILLMAN, HENRY, 155 East Adams Ave., Detroit, Mich. *Bot.*, *Anthropol.*
1055. GILPIN, Dr. BERNARD, Halifax, N. S. *Orn.*, *Ichth.*
1056. GILPIN, EDWIN, A. M., F. G. S., 26 Spring Gardens, Halifax, N. S. *Mining Engineer*, *Local Geol.*
1057. GILSON, F. HOWARD, Reading, Mass. *Phæn. Bot.*, *Ferns.* Coll.
1058. GISSLER, CARL F., Ph.D., 211 Second St., Brooklyn, E. D., N. Y. *Arthropoda.*
1059. GLASCO, J. M., Gilmer, Tex. *Bot.*, *Min.*
1060. GLASS, JAMES H., M. D., Watkins, N. Y. *Comp. Anat.*, *Con.* Coll. Ex.
1061. GLEASON, HERBERT, Malden, Mass. *Geol.*, *Bibliog. of Sci.*
1062. GODBEY, S. M., Morrisville, Polk Co., Mo. *Bot.*, *Geol.* Coll. Ex.
1063. GODDARD, ANSON M., 33 Free St., Portland, Maine. *Orn.* Coll. Ex.
1064. GODDARD, CHAS. W., Rockford, Ill. *Bot.* Coll. Ex.
1065. GOFF, JULIA H., Red Bank, N. J. *Phæn. Bot.*, *Ferns.* Coll. Ex.
1066. GOLDSCHMIDT, S. A., Ph.D., 59-61 Liberty St., New York City. *Geol.*
1067. GOMEZ, JUAN E., Monterey, Cal. *Oöl.*, *Mollusks.*
1068. GOODALE, Prof. GEO. L., Cambridge, Mass. *Bot.*
1069. GOODE, G. BROWN, Curator U. S. National Museum, Ass't U. S. Fish Commission, Smithsonian Inst., Washington, D. C. *Phæn. Bot.*, *Ferns*, *Geog. Distrib.*, *Mam.*, *Ichth.*, *Reptiles*, *Amphibians; Nat. Hist. of Bermudas: Fisheries.* Coll. Ex.
1070. GOODELL, L. W., Amherst, Mass. *Bot.: Floriculture; Ent.: Lepidoptera.* Coll.
1071. GOODHUE, CHAS. F., Webster, N. H. *Orn.*, *Oöl.*, *Zoöl.*, *Ent.* Coll. Ex.
1072. GOODRICH, Mrs. LEONORA, 99 Willow St., Syracuse, N. Y. *Bot.*
1073. GOODRICH, WILBUR F., Leominster, Mass. *Con.*, *Min.* Coll. Ex.
1074. GOODSPEED, P. P., Milford, Mass. *Micros.*

1075. GOODWILLIE, D. H., D D.S., 160 W. 34th St., New York City. *Micros.*
1076. GOODWIN, A. C., Charlestown, Clark Co., Ind. *Bot., Geol., Palæo.* Coll. Ex.
1077. GOODWIN, ELAM M., Hartland, Vt. *Min., Con.* Coll. Ex.
1078. GOODYEAR, W. A., Mining Geologist, San Francisco, Cal. *Geol., Engineering.*
1079. GORDON, J. R., Fairport, N. Y. *Micros.*
1080. GORDON, W. E., Shelter Island, Suffolk Co., N. Y. *Algæ* (Coll.) *Local Archæo.* (Coll.)
1081. GORDY, J. P., Middletown, Conn.
1082. GORTON, DAVID A., M. D., 291 Broadway, N. Y. *Geol., Vert. Emb., Hymenoptera, Worms.*
1083. GOSS, B. F., Pewaukee, Waukesha Co., Wis. *Oöl.* Coll. Ex.
1084. GOTTSCHALK, A. C., 175 No. Salina St., Syracuse, N. Y. *Micros.*
1085. GOULD, S. CLARK, Manchester, N. H. *Gen. Sci.* Coll. Ex.
1086. GRAEF, EDW. L., 40 Court St., Brooklyn, N. Y. *Lepidoptera.* Coll. Ex.
1087. GRAF, LOUIS, Van Buren, Ark. *Palæo., Lithol., Geol.* Coll. Ex.
1088. GRAHAM, CLARE W., St. Johnsbury, Vt. *Tax.* Coll. Ex.
1089. GRAHAM, F., E. M., 2615 Pine St., St. Louis, Mo. *Min.* Ex.
1090. GRAHAM, I. DAY, Prin. High Schools, Elmdale, Chase Co., Kans. *Ent., Orn.* Coll. Ex.
1091. GRANDY, C. D., Prof. Univ. N. C., Chapel Hill, N. C. *Min.*
1092. GRANT, G. H., Castleton, Vt. *Orn., Oöl.* Coll. Ex.
1093. GRANT, H. C., Prin. High School, Centreville, Iowa. *Micros.*
1094. GRANT, JAMES A., M. D., F. G. S., M. R. C. P. (London, Eng.), F. R. C. S. (Edinburgh), Ex. Pres. Canada Medical Assoc., Ex. Pres. College of Surgeons, Ontario, Can., Corr. Memb. Acad. Nat. Sci., Phila., Pa., Ottawa, Can. *Geol.*
1095. GRANT, J. M., Crowellton, Buffalo Co., Neb. *Con.*
1096. GRAVES, GEO. H., Dubuque, Iowa. *Orn.*
1097. GRAY, ARTHUR F., Nat. Hist. Artist, Danversport, Mass. *Mollusca.* Coll. Ex.

1098. GRAY, Prof. ASA, M. D., Botanic Gardens, Cambridge, Mass. *Bot.*

1099. GREATA, J. M., Ottawa, Can. *Bot.*

1100. GREEN, CALEB, M. D., Homer, N. Y. *Phæn. Bot., Ferns, Diatoms, Micros., Lepidoptera.* Coll.

1101. GREEN, FRED C., 167 Fourth St., Milwaukee, Wis. *Geol.* Coll.

1102. GREEN, HENRY A., Atco, N. J. *Bot., Min., Geol.* Coll. Ex. minerals and woods.

1103. GREEN, Dr. JESSE, Westchester, Pa. *Micros.*

1104. GREEN, J. C., M. D., 124 Swan St., Buffalo, N. Y. *Fungi, Algæ, Desmids, Diatoms, Geol., Micros., Gen. Biol., Orn.*

1105. GREEN, SAMUEL A., M. D., Boston, Mass. *Archæo.* Coll.

1106. GREEN, TRAILL, M. D., Easton, Pa. *Bot.*

1107. GREEN, WM. LAWRENCE, Box 2334, Boston, Mass. *Orn., Oöl.* Coll. Ex.

1108. GREENLEAF, R. C., 33 Summer St., Boston, Mass. *Diatoms, Micros.* Coll.

1109. GREENLEAF, ROBERT W., A. B., Botanic Garden, Cambridge, Mass. *Bot.*

1110. GREENWOOD, E. C., Ipswich, Mass. *Orn., Tax.* Coll.

1111. GREENWOOD, JAMES, jr., West Boylston, Mass. *Ent.* Coll. Ex.

1112. GREGG, Dr. ROBERT J., San Diego, Cal. *Anthropol.*

1113. GREGG, WM. H., M. D., Elmira, N. Y. *Orn., Ichth.* Coll.

1114. GREGORY, Prof. E. S., Youngstown, O. *Micros.*

1115. GREGORY, J. J. H., Marblehead, Mass. *Min., Con., Indian Antiquities.* Coll.

1116. GREY, ROBERT M., Kenwood, Albany Co., N. Y. *Oöl., Lepidoptera, Coleoptera; Palæo.: Plants.* Coll. Ex.

1117. GREY, WM., Kenwood, Albany Co., N. Y. *Bot., Ent.* Coll. Ex.

1118. GRIDLEY, A. L., B. D., Benzonia, Benzie Co., Mich. *Gen. Nat. Sci.*

1119. GRIFFIN, WM. W., Lynn, Mass. *Min., Ent., Micros., Gen. Biol.* Coll. Ex.

1120. GRIFFING, BYRON, Shelter Island, Suffolk Co., N. Y. *Crypt. Bot.: Marine Algæ.* Coll. Ex.

1121. GRIFFING, MOSES B., Shelter Island, Suffolk Co., N. Y. *Orn., Oöl.* Coll. Ex.

1122. GRIFFITH, E. H., A. M., Fairport, N. Y. Coll. Ex
1123. GRIFFITH, H. G., M. D., Marengo, Iowa. *Ent.: Coleoptera.* Coll. Ex.
1124. GRIFFITH, J. P. CROZER, Upland, Delaware Co., Pa. *Phæn.Bot., Ferns.* Coll.
1125. GRINNELL, GEO. BIRD, New Haven, Conn. *Orn., Vert.Palæo., Osteol.* Coll.
1126. GROESEL, CHAS. E., Akron, O. *Geol., Photog., Ent.* Coll. Ex.
1127. GROFF, GEO. G., M. D., Prof. Nat. Sci., West Chester, Pa. *Ferns, Gen.Biol., Physiol.* Coll. Ex.
1128. GROH, EDWARD, Brooklyn E. D., N. Y. *Ent.*
1129. GROSS, ORAN R., M. D., 455 W. 43rd St., New York City. *Phæn.Bot., Crypt.Bot., Mollusks.* Coll.
1130. GROTE, AUG. R., Director Mus. Buffalo Soc. Nat. Sci., Buffalo, N. Y. *Biol., Amphibians, Fossils, Crustacea, Moths.*
1131. GROUT, D. E., No. McGregor, Iowa. *Orn., Oöl.* Coll. Ex.
1132. GRUBER, F. (Inventor of the "Zoographicon"), Director Mus. Woodward's Gardens, 2239 Mission St., San Francisco, Cal. *Zöol., Orn., Oöl.* Coll. Ex.
1133. GRUNOW, J., 637 Sixth Ave., New York City. *Micros.*
1134. GUIGNARD, J. A., Ottawa, Can. *Bot.*
1135. GUILD, E. W., Monument Station, Wallace Co., Kans. *Ent.: Coleoptera.* Coll. Ex.
1136. GUILD, IRVING T., Lynn, Mass. *Micros.; Crypt. Bot.: Ferns; Invertebrates.* Coll. Ex.
1137. GUILD, JAMES H., Portland, Oregon. *Mollusks.*
1138. GUILFORD, ANSON B., Red Bank, N. J. *Phæn. Bot., Ferns.* Coll. Ex.
1139. GUNDLACH, ERNST, Rochester, N. Y. *Micros.*
1140. GUNN, CHAS. W., Grand Rapids, Mich. *Orn.* Coll. Ex.
1141. GUNTHER, O. R., Curator Nat. Hist. Soc., 20 Newbury St., Worcester, Mass. *Ent., Coleoptera.* Coll. Ex.
1142. GUNTHER, W., Sheboygan, Wis. *Orn., Oöl., Lepidoptera, Herpetol.* Coll. Ex.
1143. GURLEY, WILLIAM, Danville, Ill. *Invert. Palæo.* Spec.— *Brachiopoda.* Coll. Ex.
1144. GUTTENBERG, GUSTAVUS, Wheeling, W. Va. *Bot.* Coll. Ex.
1145. GUYOT, Prof. A., Princeton, N J. *Geol., Phys. Geog., Arçhæo.* Coll. Ex.

1146. HABIRSHAW, FRED'K, F. R. M. S., 6 W. 48th St., New York City. *Diatomaceæ.* Coll. Ex.

1147. HABIRSHAW, JOHN, M. D., 6 W. 48th St., New York City. *Micros.*, *Histol. of Vert.* Coll.

1148. HADLEY, E., M. D., 191 Virginia Ave., Indianapolis, Ind. *Micros.*

1149. HADLEY, Miss LIDA D., Richmond, Ind. *Geol.* Coll. Ex.

1150. HAFER, E. E., Reading, Pa. *Min.*

1151. HAGAN, Miss JENNIE, So. Royalton, Vt. *Min.* Coll. Ex.

1152. HAGAN, Prof. H. A., M. D., 7 Putnam Ave., Cambridge, Mass. *Articulates.* Coll. Ex.

1153. HAGENY, JOHN H., 350 E. N. Y. St., Indianapolis, Ind. *Con.* Ex.

1154. HAGER, ALBERT D., Sec'y and Librarian, Chicago Hist. Soc., 463 So. Leavitt St., Chicago, Ill. *Geol.*, *Min.*, *Archæo.* Coll. Ex.

1155. HAIGHT, CHAS. C., East Homer, Cortland Co., N. Y. *Orn.*, *Bot.* Coll. Ex.

1156. HAINES, E. M., Pleasant Grove, Pa. *Orn.* Coll. Ex.

1157. HAINES, Mrs. MARY P., L.B. 1094, Richmond, Ind. *Crypt. Bot.*: *Ferns*, *Mosses*; *Invert. Palæo.* Coll. Ex.

1158. HALDEMAN, Dr. S. S., LL. D., Prof. Comp. Philol., Univ. of Pa., Chickies, Pa. *Anthro.*, *Philol.* Coll.

1159. HALE, EDWIN W., Chicago, Ill. *Micros.*

1160. HALE, Prof. L. B. (Hanover, N. H.), Girard Ave., Phila., Pa. *Micros.*

1161. HALE, PHILIP L., 39 Highland St., Roxbury, Mass. *Ferns*, *Algæ*, *Orn.* Ex.

1162. HALE, W. C. I., Jamestown, N. Y. *Micros.*

1163. HALE, WM. H., Ph. D., 50 Clinton Ave., Albany, N. Y. *Gen. Biol.*, *Anthropol.*

1164. HALL, A., East Rockport, O. *Orn.* Coll. Ex.

1165. HALL, ASA F., Hudson, Mass. *Geol.*, *Min.* Coll. Ex.

1166. HALL, CLIFFORD B., North Raynham, Mass. *Orn.*, *Oöl.* Coll. Ex.

1167. HALL, Rev. C. H, D. D., 157 Montague St., Brooklyn, N. Y. *Bot.* Coll. Ex.

1168. HALL, C. W., Prof. Univ. of Minnesota, 601 University Ave., Minneapolis, Minn. *Geol.*, *Min.*

1169. HALL, ELIHU, Athens, Menard Co., Ill. *Bot.*, *Con.* Coll. Ex. for far Northern and Southern species.

1170. HALL, F. W., M. D., New Haven, Conn. *Bot.*, *Orn.* Ex.

1171. HALL, Prof. ISAAC H., 610 Chestnut St., Phila., Pa. *Bot.: Ferns.* Coll. Ex.

1172. HALL, JAMES, State Geologist and Director N. Y. State Mus., Albany, N. Y. *Geol.*, *Palæo.*, *Geog. Distrib.*, *Fossil Crustacea*, *Mollusks*, *Radiates*, *Sponges*, *Protozoa.* Coll. Ex.

1173. HALL, JOHN W., jr., Covington, Ky. *Palæo.*, *Min.* Coll. Ex.

1174. HALL, Capt. W. P., Davenport, Iowa. *Archæo.*

1175. HALLOCK, CHARLES, 237 Gates Ave., Brooklyn, N. Y. *Ichth.* Coll.

1176. HALLOWELL, SUSAN M., Wellesley College, Wellesley, Mass. *Bot.* Coll. Ex.

1177. HALSTED, BYRON D., Office of American Agriculturist, 245 Broadway, N. Y. City. *Crypt. Bot.*

1178. HAMBACH, G., M. D., 2824, Cass Ave., St. Louis, Mo. *Palæo.*, *Bot.* Coll. Ex. minerals and fossils for fossils.

1179. HAMBLY, D. W., Spanish Ranch, Plumas Co., Cal. *Geol.*, *Min.*, *Metall.*, *Gen. Biol.* Coll. Ex.

1180. HAMEL, THOMAS E., M.A., Prof. Laval Univ., Quebec Seminary, Quebec, Can. *Natural Philosophy.*

1181. HAMILTON, HUGH, M. D., B.S., Harrisburg, Pa. *Geol.*, *Gen. Nat. Hist.* Spec.— *Comp. Physiol.* Coll. Ex.

1182. HAMILTON, JOHN, M. D., 18 Ohio St., Allegheny, Pa. *Local Ent.: Coleoptera.* Coll. Ex.

1183. HAMLIN, A. C., M. D., Bangor, Me. *Palæo.*, *Min.*, *Archæo.* Coll. Ex.

1184. HAMLIN, CHARLES E., Mus. Comp. Zoöl., Cambridge, Mass. *Recent and Fossil Marine Mollusca.* Ex.

1185. HAMLIN, F. M., M. D., Auburn, N. Y. *Foraminifera*, *Con.*, *Micros.* Coll. Ex.

1186. HAMLIN, HARRY W., 1058 Delaware St., Buffalo, N. Y. *Orn.*, *Oöl.* Coll. Ex.

1187. HAMMOND, C. N., 302 Washington St, Boston, Mass. *Mam.*, *Orn.*, *Tax.* Coll.

1188. HAMPTON, C. J., Junius, Seneca Co., N. Y. *Orn.*, *Min.*, *Mollusks.* Coll. Ex. birds for Marine Shells.

1189. HAMPTON, C. M., East Hamburg, Erie Co., N. Y. *Bot.* Coll. Ex.

1190. HANAMAN, C. E., Troy, N. Y. *Micros.*, *Histol.* Coll.

1191. HANCE, THEO. F., 191 Fulton St., New York City. *Osteol., Myol., Hist. of Vert.*

1192. HANCOCK, E. M., Waukon, Iowa. *Orn., Oöl., Ent., Geol.* Coll.

1193. HANCOX, HENRY A., Spencerport, Monroe Co., N. Y. *Gen. Nat. Hist.* Coll.

1194. HANKENSON, E. L., Newark, Wayne Co., N. Y. *Bot.* Coll. Ex.

1195. HANKS, HENRY G., 1124 Greenwich St., San Francisco, Cal. *Min., Palæo.* Spec. — *Geol.* Coll. Ex.

1196. HANNA, HUGH W., Wabash, Ind. *Palæo., Geol., Min.* Coll. Ex.

1197. HARD, M. E., A. M., Washington C. H., Fayette Co., O. *Geol.* Coll. Ex.

1198. HARDEN, JOHN H., M. E., Univ. of Pa., West Philadelphia, Phila., Pa. *Mining Engineering.* Coll. Ex.

1199. HARDY, E. R., 420 Congress St., Portland, Me. *Mam., Orn., Reptiles.* Coll.

1200. HARDY, MANLY, Brewer, Me. *Orn., Oöl.* Coll. Ex.

1201. HARDY, M. C., Readfield, Me. *Micros.*

1202. HARE, SIDNEY J., 1017 Grand Ave., Kansas City, Mo. *Geol., Etymol.* Coll. Ex. in *Geol.*

1203. HARFORD, W. G. W., 2132 O'Farrell St., San Francisco, Cal. *Zöol.*

1204. HARGER, OSCAR, New Haven, Conn. *Palæo., Zoöl., Crustacea.*

1205. HARGREAVES, H. B., Box 19, Garnerville, Rockland Co., N. Y. *Micros.: Sections of wood.* Coll. Ex.

1206. HARKNESS, H. W., M. D., Sacramento, Cal. *Fungi, Micros.* Coll.

1207. HARPER, ESMONDE, 2035 Wallace St., Phila., Pa. *Orn., Oöl.* Coll. Ex.

1208. HARPER, E. T., Port Byron, Ill. *Bot., Geol.* Coll. Ex.

1209. HARPER, GEO. W., Woodward High School, Cincinnati, O. *Geol., Con.* Coll. Ex.

1210. HARRIMAN, M. C., Warner, N. H. *Orn., Oöl., Ent., Geol., Photog., Nat. Hist.* Coll. Ex.

1211. HARRINGTON, B. J., A. B., Ph.D., McGill College, Montreal, Can. *Min.*

1212. HARRINGTON, EDW., 23 Boston St., Salem, Mass. *Orn., Oöl.* Ex.

1213. HARRINGTON, MARK W., M.A., F.L.S., Sycamore, Ill. *Botany, especially Microscopical and Technological.* Coll. Ex.

1214. HARRINGTON, W. H., Ottawa, Can. *Bot., Ent.*

1215. HARRIS, F. L., So. Natick, Mass. *Horticulture.*

1216. HARRIS, I. H., Waynesville, O. *Palæo., Geol., Archæo.* Coll. Ex.

1217. HARRIS, SARAH C., Galena, Ill. *Bot., Min., Palæo.* Coll. Ex.

1218. HARRISON, EDWIN, St. Louis, Mo. *Geol., Metallurgy.*

1219. HARRISON, Rev. J. B., Vineland, N. J. *Bot.*

1220. HARRISON, JOSEPH L., Student, North Adams, Mass. *Geol.* Coll. Ex.

1221. HARRISON, T. F., New York City. *Micros.*

1222. HARRISON, W. G., M. D., 69 Central St., Baltimore, Md. *Micros.*

1223. HART, WM. HOWARD, Troy, N. Y. *Micros.*

1224. HARTMAN, JOHN H., Lebanon, Warren Co., O. *Palæo., Min.* Coll. Ex.

1225. HARTMAN, W. D., M. D., West Chester, Pa. *Mollusca.* Coll.

1226. HARTRANFT, Rev. C. R., New Brunswick, N. J. *Micros.*

1227. HARTSHORNE, Prof. HENRY, A. M., M. D., Germantown, Phila., Pa. *Gen. Biol.*

1228. HARTT, Mrs. CHAS. FRED, 118 Park St., Buffalo, N. Y. *Geol., Min., Antiquities, Pottery.* Coll.

1229. HARTWELL, SAMUEL, Lincoln, Mass. *Horticulture.*

1230. HARVEY, F. L., Prof. of Sci., Ark. Indust. Univ., Fayetteville, Ark. *Phæn. Bot., Ferns, Geol.* Coll. Ex.

1231. HARVEY, LEON F., M. D., Buffalo, N. Y. *Ent.* Coll. Ex.

1232. HARVEY, WM., Bradford, Ill. *Bot.* Coll. Ex.

1233. HASKELL, Miss C. C., Teacher of Botany, Vassar College, Poughkeepsie, N. Y.

1234. HASKELL, EDWARD, New Bedford, Mass. *Horticulture, Orchids, Ferns, etc.* Coll. Ex.

1235. HASKELL, JOSHUA P., Marblehead, Mass. *Bot., Min., Invert. Emb.* Coll.

1236. HASKINS, J. P., L. B. 432, Saratoga Springs, N. Y. *Geol., Min., Archæo.* Coll. Ex.

1237. HASSLER, FERDINAND A., M. D., Ph.D., 1336 11th St. N. W., Washington, D. C. *Phæn. Bot., Geog. Distrib., Mollusks.* Coll.

1238. HASSON, C. B., Dayton, Campbell Co., Ky. *Gen., Mollusks.* Coll. Ex.
1239. HASSON, W. F. C., U. S. N. Acad., Annapolis, Md. *Palæo.* Coll.
1240. HATCH, C. C., Oneida Community, Oneida, N. Y. *Mam., Orn.* Coll.
1241. HATCH, DELOS, Oak Centre, Fond du Lac Co., Wis. *Tax.* Coll. Ex.
1242. HATCH, Mrs. DELOS, Oak Centre, Wis. *Oöl.* Ex.
1243. HATCH, P. L., M. D., Minneapolis, Minn. *Orn.* Coll. Ex.
1244. HATCH, S. R., Milford, Mass. *Diatoms, Min., Micros., Photog., Infusoria, Electricity.* Coll. Ex.
1245. HAUPT, H., jr., M. D., Ph.D., "The Rogers Engineering Library," Univ. of Pa., Phila., Pa. *Geol., Bot.* Coll. Ex.
1246. HAUPT, J. G., Davenport, Iowa. *Phæn. Bot., Ferns, Gen. Biol.* Coll.
1247. HAUXHURST, D. C., M. D., Battle Creek, Mich. *Micros.* Coll.
1248. HAWES, ALFRED, Sherborn, Mass. (Now in Kimberly, Diamond Fields, So. Africa). *Orn., Ent.* Coll. Ex.
1249. HAWES, GEO. W., Ph.B., New Haven, Conn. *Min., Lithol.*
1250. HAWKES, AUG., Box 437, Wakefield, Mass. *Micros.*
1251. HAWLEY, Mrs. HELEN D., Suspension Bridge, Niagara Co., N. Y. *Phæn. Bot., Ferns, Mosses, Algæ, Geol., Min.* Coll. Ex.
1252. HAWLEY, Rev. R. E., A. M., Cleves, Hamilton Co., O. *Indian Relics, Cincinnati Fossils, Goniatiles.* Coll.
1253. HAWLEY, R. V., 147 Catharine St., Utica, N. Y. *Lepidoptera, Coleoptera.*
1254. HAYDEN, Dr. F. V., U. S. Geologist, 509 7th St., Washington, D. C. *Geol.*
1255. HAYES, A. L., Aledo, Mercer Co., Ill. *Oöl., Con.* Coll. Ex.
1256. HAYES, CHAS. E., Cor. Main & Dyre Sts., Frankford, Phila., Pa. *Orn., Oöl.* Coll. Ex.
1257. HAYES, S. D., M. D., Boston, Mass. *Micros.*
1258. HAYNES, ERNEST E., L. D. 55, Oberlin, O. *Ent., Oöl.* Coll. Ex.
1259. HAYNES, J. N., Indianapolis, Ind. *Micros.*

1260. HAYWOOD, H. R., 32 Geach St., Summer Lane, Birmingham, Eng.
1261. HAYT, H. W., Lowville, Lewis Co., N. Y. *Mam.*, *Orn.* Coll. Ex.
1262. HAZARD, R. G., 2d, Peace Dale, R. I. *Oöl.* Coll.
1263. HAZEN, LEVI, C. E., West Hartford, Vt. *Min.*, *Geol.* Coll.
1264. HEAD, W. R., Ill. C. C. R., Chicago, Ill. *Fossils*, Coll. Ex.
1265. HEADING, ALICE J., Peoria, Ill. *Phæn.Bot.* Coll.
1266. HECOX, LAURA J. F., Santa Cruz, Cal. *Crustacea*, *Mollusks.* Coll. Ex.
1267. HEDDEN, ROBERT E., 33 Brittles Ave., Columbus, O. *Oöl.* Coll. Ex.
1268. HEDGE, FREDERICK H., jr., Lawrence, Mass. *Bot.*
1269. HEDGES, C. E., Orange, N. J. *Oöl.* Coll. Ex.
1270. HEDLEY, CHAS. H., Medina, Orleans Co., N. Y. *Orn.*, *Oöl.*, *Hemiptera*, *Lepidoptera.* Coll. Ex.
1271. HEDLEY, GEORGE H., Artist and Taxidermist, Medina, Orleans Co., N. Y. *Orn.* Coll. Ex.
1272. HEIGHWAY, S. C., 86 W. 7th St., Cincinnati, O. *Coleoptera*, *Fossils and Relics.* Coll. Ex.
1273. HEILIGBRODT, L., Bastrop, Tex. *Lepidoptera*, *Hymenoptera*, *Coleoptera*, *Reptiles.* Coll. Ex.
1274. HEIMSTREET, THOS. B., M. D., Troy, N. Y. *Mam.*, *Orn.*, *Lepidoptera*, *Coleoptera.* Coll.
1275. HELBING, C. R., East Toledo, O. *Orn.*, *Tax.* Coll.
1276. HELBING, T. O., East Toledo, O. *Tax.* Coll. Ex.
1277. HELME, JAMES W., jr., Box 64, Adrian, Mich. *Orn.*, *Oöl.*, *Tax.* Coll. Ex.
1278. HEMPHILL, HENRY, Oakland, Cal. *Mollusks.* Coll.
1279. HENDERSON, JOHN G., Winchester, Ill. *Anthro.*, *Orn.* Coll. Ex.
1280. HENDERSON, Mrs. J. G., Winchester, Ill. *Con.*, *Oöl.* Ex.
1281. HENDRICK, M. S., Sandwich, Ill. *Orn.*, *Mam.* Coll. Ex.
1282. HENRY, JOHN S., Maryville, E. Tenn. *Orn.*, *Oöl.*, *Tax.* Coll. Ex.
1283. HENRY, WM. A., Ithaca, N. Y. *Phæn.Bot.*, *Ferns.* Coll. Ex.
1284. HENRY, WM. T., Mineral Point, Wis. *Min.* Coll. Ex.
1285. HENSEL, M., Columbus, O.

1286. HENSHALL, J. A., M. D., Cynthiana, Ky. *Zool.* Coll. Ex.

1287. HENSHALL, Mrs. J. A., Cynthiana, Ky. *Geol.* Coll. Ex.

1288. HENSHAW, SAMUEL, 77 Newbury St., Boston, Mass. *Ent.: Coleoptera.* Coll.

1289. HENSHAW, H. W., Naturalist, Office of Geographical Surveys West of 100th meridian, Washington, D. C. *Orn.* Coll. Ex.

1290. HERBEIN, H. J., Sinking Spring, Berks Co., Pa. *Min.* Coll. Ex.

1291. HERBERT, WM., S. B., Lynn, Mass. *Ent., Micros.* Coll. Ex.

1292. HERBST, WILLIAM, M. D., Trexlertown, Pa. *Phæn. Bot.* Coll. Ex.

1293. HERDMAN, W. J., A. M., M. D., Ann Arbor, Mich. *Archæo., Ethnol.*

1294. HERON, G. C., Ottawa, Can. *Superficial Geol., Invert. Palæo., Con.* Ex.

1295. HERRICK, C. L., 81 6th St., Minneapolis, Minn. *Phæn. Bot., Ent., Micros., Invert. Palæo., Orn.* Coll. Ex.

1296. HERRICK, HAROLD, Brick Church, Orange, N. J. *Orn.* Coll.

1297. HERRICK, SOPHIE B., 34 McCullot St., Baltimore, Md. *Micros.*

1298. HERRIOT, Dr. J. V., Valparaiso, Ind. *Micros.*

1299. HERVEY, Rev. A. B., Troy, N. Y., *Ferns, Mosses, Lichens, Algæ.* Coll. Ex.

1300. HERZER, Rev. H., Berea, O. *Crypt. Bot.: Mosses; Palæo., Geol., Micros., Orn.* Coll. Ex.

1301. HESS, FRANK W., 3rd Artillery, U. S. A.; Address, Allegheny Coll., Meadville, Pa. *Orn.* Coll. Ex.

1302. HEUSTIS, Mrs. CAROLINE E., Carleton, St. John, N. B. *Ent.: Lepidoptera.* Coll. Ex.

1303. HEWS, A. H., No. Cambridge, Mass.

1304. HEXAMER, Dr. F. M., Newcastle, Westchester Co., N. Y. *Bot.* Coll.

1305. HIBBARD, HOMER N., 159 La Salle St., Chicago, Ill. *Coleoptera, Lepidoptera.* Coll.

1306. HIBBARD, WILLIAM N., Hyde Park, Ill. *Lepidoptera, Coleoptera.* Coll. Ex.

1307. HICKS, JOHN D., Old Westbury, Queens Co., N. Y. *Gen. Biol., Orn.* Coll.

1308. HICKS, Prof. L. E., *Invert. Palæo., Geol., Lithol.* Coll. Ex.

1309. HIDDEN, WM. E., 142 Broadway, New York City. *Min.: Gems.* Coll. Ex.

1310. HIGBEE, CHAS. H., Salem, Mass. *Crypt.Bot., Min., Micros.*

1311. HIGGINS, F. W., Detroit, Mich. *Plants, Botanical drawing and coloring.*

1312. HIGGINS, Dr. J. J., 23 Beekman Place, New York City. *Micros.*

1313. HIGGINSON, T. W., 20 Ware St., Cambridge, Mass. *Ent.*

1314. HIGH, B. Y., West Point, Cuming Co., Neb. *Con.* Coll. Ex.

1315. HIGH, EZRA, Poplar Neck, Reading, Pa. *Archæo.*

1316. HIGLEY, D. J., A. M., Univ. of Mich., Ann Arbor, Mich. *Gen.Zoöl., Comp.Anat.; Ent.: Lepidoptera, Coleoptera.* Coll. Ex.

1317. HIGLEY, W. K., Box 1229, Ann Arbor, Mich. *Bot.* Coll. Ex.

1318. HILDRETH, JOHN L., M. D., 37 Brattle St., Cambridge, Mass.

1319. HILGARD, E. W., Ph. D., Prof. Univ. of Cal., Berkeley, Cal. *Geol., Bot.* Coll.

1320. HILL, Mrs. CHARLOTTE, Florissant, El Paso Co., Colo. *Min., Geol.* Coll. Ex.

1321. HILL, Rev.E. J., Englewood, Ill. *Phæn.Bot., Mosses, Palæo., Geol.* Coll.

1322. HILL, E. K., Brownsville, Yuba Co., Cal. *Nat.Sci.* Coll. Ex.

1323. HILL, FRANK A., Prin. High School, 39 Carmel St., Chelsea, Mass. *American Archæo.*

1324. HILL, FRANKLIN C., E. M. Geological Mus., Box 338, Princeton, N. J. *Geol., Ent.*

1325. HILL, Dr. H. H., Cincinnati, O. *Archæo., Con., Palæo.* Coll.

1326. HILL, RUSSELL S., Mt. Airy, Phila., Pa. *Osteol., Reptiles, Amphibians.* Coll.

1327. HILL, W. W., Albany, N. Y. *Lepidoptera.* Coll. Ex.

1328. HILTON, A. P., 331 Hudson St., New York City. *Coleoptera.* Coll. Ex.

1329. HIMES, ISAAC N., M. D., Prof. Medical Coll., Cleveland, O. *Human Physiol., Pathological and Physiological Histology.*

1330. HIND, Prof. H. Y., Windsor, N. S. *Geol.*
1331. HINDE, GEO. J., F. G. S., 29 Bloor St. E., Toronto, Can. *Geol., Palæo.* Coll.
1332. HINDS, J. I. D., A. M., C. E., Prof. of Nat. Sci., Cumberland Univ., Lebanon, Tenn.
1333. HINDS, WM. ALFRED, Oneida, N. Y. *Bot.* Coll. Ex.
1334. HINE, F. B., B. S., Instructor in Geol. and Palæo., Cornell Univ., Ithaca, N. Y. *Phæn. Bot., Fungi, Palæo., Geol.* Coll. Ex.
1335. HINKLEY, HOLMES, 1 Fairfield St., Boston, Mass. *Lepidoptera.* Coll. Ex.
1336. HINMAN, CHAS. D., Columbus, O. *Oöl.* Coll. Ex.
1337. HINSDALE, Rev. ROBERT G., Pres. Hobart Coll., Geneva, N. Y. *Ent.: Lepidoptera.* Coll. Ex.
1338. HITCHCOCK, Prof. C. H., Hanover, N. H. *Geol.* Coll. Ex.
1339. HITCHCOCK, Miss MARY, Hanover, N. H. *Bot.: Ferns.*
1340. HITCHCOCK, N. M., Knoxville, Ill. *Gen. Nat. Sci.*
1341. HITCHCOCK, Prof. R., F. R. M. S., 53 Maiden Lane, New York City. Editor "Am. Quart. Microscopical Journal." *Fresh Water Algæ, Micros.*
1342. HITT, Col. D. F., Pres. Acad. Nat. Sci., Ottawa, Ill. *Geol., Archæo.* Coll. Ex.
1343. HOADLEY, FREDERICK H., M. D., New York City. *Orn., Osteol.*
1344. HOBART, ARTHUR, Penn Yan, N. Y. *Bot., Micros.*, Coll. Ex.
1345. HOBBS, CHAS. E., 63 Hanover St., Boston, Mass. *Bot.* Spec.— *Diatoms.*
1346. HOBBS, ORLANDO, Jeffersonville, Ind. *Palæo., Geol., Metall., Photog.* Coll. Ex.
1347. HOBBY, C. M., M. D., Iowa City, Iowa. *F. W. Algæ.* Coll. Ex.
1348. HOBSON, JAMES, Gibraltar, Mich. *Mam., Orn., Ichth., Reptiles.* Coll. Ex.
1349. HOBSON, J. W., Saco, Me. *Horticulture.*
1350. HODGE, F., A.B., A M., M. D., Hudson, O. *Coleoptera.* Coll. Ex.
1351. HODGES, GEO. C., Utica, N. Y.
1352. HOFFMAN, AUGUST, Washington, Ill. *Ent.*
1353. HOFFMAN, D. A., M. D., Oskaloosa, Mahaska Co., Iowa. *Palæo., Geol., Paleology.* Coll. Ex.

1354. HOFFMAN, WALTER J., M. D., U. S. Geolog. Survey. Washington, D. C. *Min.* Coll. Ex.

1355. HOFFMEISTER, AUG. W., Fort Madison, Lee Co., Iowa. *Coleoptera, Lepidoptera.* Coll. Ex.

1356. HOGE, PEYTON H., A.M., Instructor in Mathematics, University School, 109 8th St., Richmond, Va. *Geol., Bot.* Coll. Ex.

1357. HOHNES, WM. M., Greenwich, Washington Co., N. Y. *Con.*

1358. HOITT, CHAS. W., Nashua, N. H. *Ferns.* Coll. Ex.

1359. HOLBROOK, FRANCIS N., C. E., School of Mines, Columbia Coll., New York City. *Metallurgy.*

1360. HOLBROOK, J. J., Keene, N. H. *Bot., Geol., Min., Articulates.* Coll. Ex.

1361. HOLBROOK, W. C., Coleta, Whitesides Co., Ill. *Geol., Archæo., Mollusks.* Coll. Ex.

1362. HOLDEN, W., Marietta, O. *Arachnoidea, Araneæ.* Coll. Ex.

1363. HOLDER, J. B., Ass't Supt. Amer. Mus. Nat. Hist., Central Park, New York City.

1364. HOLDER, Miss MARY H., Clinton, Mass. *Bot., Orn., Ent.* Coll.

1365. HOLLAND, Rev. F. R., Hope, Ind. *Phæn. Bot., Mollusks.* Coll.

1366. HOLLAND, Prof. J. W., M. D., Louisville, Ky. *Gen. Biol.*

1367. HOLLENBUSH, H. W., 320 Spring Garden St., Reading, Pa. *Min., Microscopical Fungi, Diatomaceæ.* Coll. Ex.

1368. HOLLICK, ARTHUR, Box 105, New Brighton, Staten Island, N. Y. *Phæn. Bot., Min., Orn.* Coll. Ex.

1369. HOLMAN, D. S., Philadelphia, Pa. *Micros.*

1370. HOLMAN, F. A., M. D., San Francisco, Cal. *Orn., Micros.*

1371. HOLMAN, GEO. M., B. S., Fitchburg, Mass. *Ent., Micros.* Coll. Ex.

1372. HOLMES, BAYARD, Yorkville, Kendall Co., Ill. *Fresh Water Mollusca.* Coll. Ex.

1373. HOLMES, Prof. F. S. (Discoverer of the Carolina Phosphate beds), Charleston, S. C. *Palæo., Geol.* Coll. Ex.

1374. HOLMES, J. A., Cornell Univ., Ithaca, N. Y. *Bot., Ent.* Coll.

1375. HOLMES, J. C., 41 Moffat Block, Detroit, Mich. *Ent.*

1376. HOLMES, LUCIEN, Standish, Cumberland Co., Me. *Min., Bot.* Coll. Ex. *Min.*
1377. HOLMES, Miss MARY E., Box 485, Rockford, Winnebago Co., Ill. *Phæn.Bot., Ferns, Alg., Orn.* Coll. Ex.
1378. HOLMES, WILLIAM, Warsaw, Wyoming Co., N. Y. *Micros.*
1379. HOLMES, W. H., 509 7th St., U. S. Geolog. Surv., Washington, D. C. *Geol., Archæo.*
1380. HOLT, Dr. A. F., Cambridgeport, Mass. *Micros.*
1381. HOLTERHOFF, G., jr., Avondale, Cincinnati, O. *Orn., Oöl.* Coll. Ex.
1382. HOLWAY, EDW. W., Decorah, Winneshiek Co., Iowa. *Phæn.Bot., Fungi, Micros.* Coll.
1383. HONEYMAN, Rev. DAVID, D. C. L., Provincial Geologist, Provincial Mus., Halifax, N. S. *Geol., Invert.Palæo.*
1384. HOOD, E. LYMAN, Minneapolis, Minn. *Orn., Oöl., Micros.* Coll. Ex.
1385. HOOD, LEWIS E., Norwich, Conn. *Ent., Min.* Coll.
1386. HOOKER, J. N., Castleton, Vt. *Orn., Oöl.*
1387. HOOPER, F. W., A. B., Keene, N. H. *Comp.Anat., Crypt.Bot.* Coll. Ex.
1388. HOOPER, H. T., Sherman, Grayson Co., Tex. *Tax.*
1389. HOOPES, JOSIAH, West Chester, Pa. *Bot., Coniferæ.* Coll.
1390. HOOPES, J. S., New Brighton, Pa. *Micros., Ent., Relics, Fossils.* Coll. Ex.
1391. HOPE, HENRY W., Paint P. O., Highland Co., O. *Geol., Archæo.* Coll. Ex.
1392. HOPKINS, F. V., M. D., East Lake, Lake Co., Cal. *Min., Geol.* Coll. Ex.
1393. HOPKIRK, W. H., Burlington, Iowa. *Bot., Zoöl.*
1394. HOPPIN, Miss RUTH, Teacher, Michigan State Normal School, Ypsilanti, Mich. *Bot.* Coll. Ex.
1395. HORN, GEORGE H., M. D., 874 N. 4th St., Phila., Pa. *N. A. Coleoptera.* Coll.
1396. HORNADAY, WM. T., General Collector and Taxidermist, Rochester, N. Y. *Mam.*
1397. HORR, ASA, M. D., Dubuque, Iowa. *Phæn.Bot., Micros.* Coll.
1398. HOSFORD, F. H. Charlotte, Chittenden Co., Vt. *Bot.* Ex.
1399. HOSKINS, WM., 286 Centre Ave., Chicago, Ill. *Micros.*
1400. HOSMER, ELIZA, Concord, Mass. *Phæn.Bot.; Crypt. Bot.: Ferns.* Ex.

1401. HOTCHKISS, MARY T., 42 East Onondaga St., Syracuse, N. Y. *Ferns.* Coll. Ex.
1402. HOTCHKISS, W. H., M. D., New Haven, Conn. *Orn.* Coll.
1403. HOUGH, FRANKLIN B., Lowville, Lewis Co., N. Y. *Bot.*
1404. HOUGH, ROMEYN B., Lowville, N. Y. *Orn.* Coll. Ex.
1405. HOUGHTON, CHAS. A., West Medway, Mass. *Orn.* Coll. Ex.
1406. HOUGHTON, PHILIP S., Detroit, Mich. *Orn., Oöl.*
1407. HOUSTON, GEO. M., Harrisonville, Mo. *Min., Micros.* Coll. Ex.
1408. HOVEY, C. H., 22 Tremont St., Boston, Mass. *Ferns, Mosses, Horticulture.* Coll. Ex.
1409. HOVEY, C. M., Boston, Mass. *Ferns, Mosses, Horticulture.* Coll. Ex.
1410. HOW, Prof. HENRY, Windsor, N. S. *Min.* Coll. Ex.
1411. HOWARD, CARY, 618 Eighth St., Oakland, Cal. *Coleoptera.* Coll. Ex.
1412. HOWARD, CURTIS C., Cumberland, O. *Micros.*
1413. HOWARD, SOPHIA E., M. D., Granger Place School, Canandaigua, N. Y. *Gen. Biol., Micros.* Ex.
1414. HOWE, E. C., M. D., Yonkers, N. Y. *Bot., Ent., Biol.* Coll. Ex.
1415. HOWE, Dr. LUCIEN, 9 Niagara St., Buffalo, N. Y. *Micros.*
1416. HOWELL, EDWIN E., Rochester, N. Y. *Min., Geol., Invert. Palæo.*
1417. HOWELL, JOSEPH, Willamette Slough, Oregon. *Bot.* Coll.
1418. HOWELL, ROBERT, Nichols, Tioga Co., N. Y. *Geol., Palæo., Archæo., Zoöl.* Coll. Ex.
1419. HOWERTON, WM. J., Garnett, Anderson Co., Kans. *Phæn. Bot., Ferns, Geol.* Coll. Ex.
1420. HOWES, C. H., C. E., Essex, Mass. *Geol., Min.* Coll. Ex.
1421. HOWEY, JOHN M., Canandaigua, N. Y. *Orn., Oöl.* Coll. Ex.
1422. HOWLAND, FRANK G., Saratoga Springs, N. Y. *Oöl.* Coll. Ex.
1423. HOWLAND, SNOWDON, Box 206, Newport, R. I. *Oöl.*
1424. HOWLETT, C. K., Rochester, N. Y. *Mam., Orn.*
1425. HOY, P. R., M. D., Racine, Wis. *Orn., Ent., Ichth., Herpetol.* Coll.

1426. HOYSRADT, LYMAN H., Pine Plains, Dutchess Co., N. Y. *Phæn.Bot.; Ferns, Potamogetons.* Coll. Ex.

1427. HOYT, BROOKS F., Ph.B., Columbus, Neb. *Orn., Nat.Hist.*

1428. HOYT, D. B., Rockport, Mass. *Ent., Orn., Oöl.* Coll. Ex.

1429. HOYT, C. K., Waterloo, Seneca Co., N. Y. *Micros.*

1430. HOYT, J. A., Box 3504, New York City. *Micros.*

1431. HUART, Prof. Victor A., Sem. of Chicoutimi, Chicoutimi, Quebec, Can. *Bot., Gen.Nat.Hist., Ent.* Coll. Ex.

1432. HUBBARD, E. H., Fitchburg, Mass. *Orn., Oöl.* Coll. Ex.

1433. HUBBARD, G. F., Box 424, Fitchburg, Mass. *Bot., Ent.* Coll. Ex.

1434. HUBBARD, G. W., M. D., Prof. of Nat. Sci., Central Tennessee Coll., Nashville, Tenn. *Bot., Geol., Min.* Coll. Ex.

1435. HUBBARD, H. G., 735 Woodbridge St. W., Detroit, Mich. *Coleoptera.* Coll. Ex.

1436. HUBBARD, LUCIUS, South Bend, Ind. *Ent.: Local Coleoptera and Lepidoptera.* Coll. Ex.

1437. HUBBARD, WALTER C., 27 W. 9th St., New York City. *Micros.*

1438. HUBER, P. A., So. Easton, Pa. *Geol., Min., Orn.* Coll. Ex.

1439. HUBREGTSE, A., 34 Cypress St., Rochester, N. Y.

1440. HUCKEL, Rev. WM., 140th St. & St. Ann's Ave., New York City. *Bot., Micros.*

1441. HUCKINS, D. T., M. D., Watertown, Mass. *Con.* Coll. Ex.

1442. HUDSON, B., Peterboro, Ontario, Can. *Mam., Orn.* Coll.

1443. HUETT, JOHN W., Columbia Station, Lorain Co., O. *Phæn.Bot., Ferns, Geol., Lepidoptera, Mollusks.* Coll. Ex.

1444. HUGHART, W. O., jr., 118 Jefferson Ave., Grand Rapids, Mich. *Geol.* Coll. Ex.

1445. HUGHES, Hon. D. D., Grand Rapids, Mich. *Orn.*

1446. HUGHES, W. H., 47 Jefferson Ave., Grand Rapids. Mich. *Geol.* Coll. Ex.

1447. HUME, JOHN, Davenport, Iowa. *Geol., Palæo., Archæo., Ethnol.*

1448. HUMPHREY, D., M. D., Lawrence, Mass. *Micros.*, *Gen.Biol.*, *Anthro.* Coll. Ex.

1449. HUMPHREY, FRED, Lawrence, Mass. *Orn.* Coll.

1450. HUMPHREY, Geo. W., Dedham, Mass. *Bot.*, *Zöol.* Coll.

1451. HUMPHREY, JAMES ELLIS, No. Weymouth, Mass. *Orn.*, *Bot.* Coll.

1452. HUMPHREYS, JOHN J., Eddytown, Yates Co., N. Y. *Horticulture*, *Orn.*, *Ent.* Coll.

1453. HUMPHREYS, JOHN T, M.A., Late Naturalist and Entomologist to the State Dep't of Agric. of Ga, Corresponding member Buffalo (N.Y.) Acad. of Nat. Sci.; Lynchburg, Va. (Morganton, N. C., for three years). *Zoöl.*, *Min.*

1454. HUNT, ALFRED O., McGregor, Iowa. *Bot.*, *Geol.*, *Min.*, *Micros.*, *Orn.* Coll. Ex.

1455. HUNT, CHAS. G., Belleville, Ontario, Can. *Con.*

1456. HUNT, DAVID, jr., A. M., M. D., 149 Boylston St., Boston, Mass. *Vert. Emb.* Ex.

1457. HUNT, EDWIN, Ph.D., Utica, N. Y. *Bot.* Coll. Ex.

1458. HUNT, GEO. M., C. E., North Argyle, N. Y. *Bot.*, *Geol.* Coll.

1459. HUNT, J. F., Garnett, Anderson Co., Kans. *Geol.*, *Ent.* Coll. Ex.

1460. HUNT, Dr. J. G., Phila., Pa. *Bot.*, *Micros.*

1461. HUNT, J. H., M. D., 41 E. Third St., Cincinnati, O. *Phæn.Bot.*, *Min.*, *Lithol.*, *Micros.* Coll. Ex.

1462. HUNT, P. G., Indianapolis, Ind. *Micros.*

1463. HUNT, Dr. T. STERRY, Montreal, Can. *Geol.*, *Min.*

1464. HUNTINGTON, GEO. S., C. E., 245 Browne St., Cincinnati, O. *Native and Foreign Land Shells.* Coll. Ex.

1465. HUNTINGTON, J. H., Box 1914, Boston, Mass. *Geol.*, *Min.*, *Lithol.*

1466. HURD, Rev. FAYETTE, Laingsburgh, Mich. *Micros.* Coll. Ex.

1467. HURLBURT, EDWARD, Utica, N. Y. *Palæo.*, *Geol.* Coll. Ex.

1468. HURTER, J., 2346 So. 10th St., St. Louis, Mo. *Orn.* Coll.

1469. HUSSEY, FREDERICK, East Orange, N. J. *Orn.*, *Oöl.* Coll. Ex.

1470. HUSSEY, GEO. B., Box 174, East Orange, N. J. *Geol.*

1471. HUSSEY, JOHN, Prof. Nat. Sci., Purdue Univ., Lafayette, Ind. *Nat. Hist.* Coll. Ex.

1472. HUSTON, SAM, B. S., Richmond, Jefferson Co., O. *Phæn. Bot., Geol., Palæo.*

1473. HUTCHINS, JOHN PARKER, Oneida, N. Y. *Mam., Orn.* Coll. Ex.

1474. HUTCHINSON, EDWARD S., C. E., Cannelton, W. Va. *Micros.*

1475. HYAMS, M. E. (re-discoverer of *Shortia galacifolia*, T & G.), Statesville, N. C. *Bot.* Coll. Ex.

1476. HYATT, ALPHEUS, Prof. of Palæo., Mass. Inst. Technol.; Custodian, B. S. N. H., Boston, Mass. *Zoöl., Palæo.*

1477. HYATT, JAMES, Stanfordville, Dutchess Co., N. Y. *Bot., Min., Palæo.* Coll.

1478. HYATT, J. D., Morrisania, New York City. *Bot., Micros.*

1479. HYDE, B. N., C. E., Pottsville, Pa. *Phæn. Bot.*

1480 HYDE, HARRY C., San Francisco, Cal. *Micros.*

1481. HYNDS, F. P., Ralston Station, Weakley Co., Tenn. *Phænogamia, Cryptogamia, Ferns.*

1482. ILLIG, HIRAM L., Millbach, Lebanon Co., Pa. *Archæo.* Coll. Ex.

1483. INGERSOLL, ERNEST, 251 York St., Jersey City, N. J. *Mam., Orn., Mollusks.*

1484. INGALLS, CHAS. E., East Templeton, Mass. *Orn., Oöl.* Coll. Ex.

1485. INGRAHAM, ROBERT C., New Bedford, Mass. *Mosses, Liverworts* (local).

1486. INGRAM, JOHN, M. D., Vineland, N. J. *Geol.* Coll. Ex.

1487. IRISH, C. W., C.E., Box 1284, Iowa City, Iowa. *Bot., Min.* Coll. Ex.

1488. IRISH, THOS. M., Dubuque, Iowa. *Phæn. Bot., Ent.* Coll.

1489. IRVING, Prof. ROLAND DUER, State Univ., Madison, Wis. *Geol., Min., Microscopic Lithol.*

1490. IRWIN, Miss LUCY, Decatur, Ill. *Phæn. Bot.; Crypt. Bot.: Mosses, Fungi, Ferns.* Coll. Ex.

1491. ISAMAN, S. G., Wheatland, Cal. *Ferns, Mosses.* Coll. Ex.

1492. ISOM, J. F., M. D., Cleveland, O. *Ent.: Lepidoptera.* Coll. Ex.

1493. JACK, JOHN G., Chateauquay Basin, Quebec, Can. *Ent.* Coll. Ex.

1494. JACKSON, A. W., Instructor in Min. and Lithol., Univ. of Cal., Berkeley, Cal. *Min.: Microscopic Lithol.* Coll. Ex.

1495. JACKSON, E. E., Pharmacist, Columbia, S. C. *Micros.*

1496. JACKSON, HALLIDAY, West Chester, Pa. *Bot.: Lichens, Fungi, Algæ.*

1497. JACKSON, JOSEPH, jr., Principal of High School, Millbury, Mass. *Bot., Micros.* Coll.

1498. JACKSON, J. A., Des Moines, Iowa. *Ent., Orn., Con.* Coll. Ex.

1499. JACKSON, J. A., 113 Ellis St., San Francisco, Cal.

1500. JACKSON, SAMUEL, 48 Macdougal St., New York City. *Micros.*

1501. JACKSON, THOMAS, West Chester, Pa. *Orn.*

1502. JACKSON, Dr., Chicago, Ill. *Micros.*

1503. JACOBS, FRANK B., McGregor, Iowa. *Collects generally.*

1504. JAEGER, HERMAN F., 455 Dearborn Ave., Chicago, Ill. *Min., Bot., Micros.* Coll.

1505. JAMES, DAVIS L., 177 Race St., Cincinnati, O. *Bot.*

1506. JAMES, HENRY, M. D., Belleville, Ontario, Can. *Physiol., Geol.* Coll.

1507. JAMES, JOSEPH F., 177 Race St., Cincinnati, O. *Bot.* Coll. Ex.

1508. JAMES, THOS. P., Cambridge, Mass. *Musci.* Coll. Ex.

1509. JAMES, U. P., 177 Race St., Cincinnati, O. *Palæo., Local Conchol.* Coll.

1510. JAMESON, CHAS. T., Oxford, Miss. *Ent.: Ophidia.* Coll. Ex.

1511. JANEWAY, JOHN H., M. D., Ass't Surgeon U. S. A., Fort Wallace, Kans. *Micros.*

1512. JARVIS, GEORGE C., M. D., Hartford, Conn. *Geol., Min., Metall., Orn., Ent.*

1513. JASPER, THEODORE, A. M., M. D., Columbus, O. *Zoöl., Orn.* Coll.

1514. JAYNE, HORACE F., S. E. Cor. 19th & Chestnut Sts., Phila., Pa. *Coleoptera of the U. S.* Coll.

1515. JEFFERIS, WM. W., West Chester, Pa. *Min.* Coll. Ex.

1516. JEFFRIES, Dr. M. JAY, Boston, Mass. *Micros.*

1517. JENCKS, F. T. (Southwick & Jencks), 283 Westminster St., Providence, R. I. *Orn.* (Coll.); *Tax., Oöl.* (Ex.).

1518. JENISON, O. A., Lansing, Mich. *Archæo.*

1519. JENKS, C. W., Groton Centre, Middlesex Co., Mass. *Bot.*

1520. JENKS, Prof. J. W. P., A.M. (Curator Mus. Brown Univ., Providence, R. I.), Middleboro, Mass. *Mam.*, *Orn.* Coll. Ex.

1521. JENKINS, Dr. THOMAS E., Louisville, Ky. *Micros.*

1522. JESUP, Rev. HENRY G., Hanover, N. H. *Bot.*

1523. JEWELL, PLINY, Hartford, Conn. *Min.* Coll.

1524. JEWELL, THEODORE F., Lieut. Com. U. S. N.; 2030 G. St. N. W., Washington, D. C. *Min.*

1525. JEWETT, CHAS., M. D., 310 Gates Ave., Brooklyn, N. Y. *Micros.*, *Micro-photog.* Coll.

1526. JEWETT, FRED. A., Pharmacist, Needham, Mass. *Bot.* Coll. Ex.

1527. JEWETT, HENRY S., A.M., M. D., Dayton, O. *Ferns*, *Lithol.*, *Micros.*, *Lepidoptera.* Coll. Ex.

1528. JILLSON, B. C., M. D., Ph.D., Pittsburg, Pa. *Geol.*, *Zoöl.*

1529. JILLSON, JAMES, Hudson, Mass. *Orn.*, *Tax.*

1530. JOHNSON, A. B., Utica, N. Y. *Fungi*, *Min.*, *Micros.*

1531. JOHNSON, A. E., M. D., Minneapolis E. D., Minn. *Fungi*, *Algæ*, *Desmids*, *Diatoms*, *Micros.*, *Anthro.*, *Infusoria.* Coll.

1532. JOHNSON, Dr. C. B., Providence, R. I. *Micros.*

1533. JOHNSON, GEO. A., Taxidermist, Marshall, Mich. *Nat. Hist.: Orn.*, *Oöl.*, *Coleoptera*, *Lepidoptera*, *Diptera.* Coll. Ex.

1534. JOHNSON, HOSMER A., M. D., Prof. Chicago Med. Coll., Chicago, Ill. *Micros.*, *Gen. Biol.*

1535. JOHNSON, JAMES S., Frankford, Phila., Pa. *Lepidoptera.* Coll.

1536. JOHNSON, LAWRENCE, M. D., 323 W. 27th St., New York City. *Bot.* Ex.

1537. JOHNSON, O. B., Curator State Cabinet Nat. Hist. Assoc., Salem, Oregon. *Ent.*, *Mollusca*, *Orn.*, *Oöl.*, *Gen. Zoöl.* Coll. Ex.

1538. JOHNSON, Miss SARAH E., Oneida Community, Oneida, N. Y. *Bot.*, *Orn.*

1539. JOHNSON, S., Holly Springs, Miss. *Micros.*

1540. JOHNSTON, Dr. CHRISTOPHER, Baltimore, Md. *Micros.*

1541. JOHNSTON, DANIEL W., Richmond, Ind. *Mam.*, *Orn.* Coll.

1542. JOHNSTON, G. WALTER, Sacramento, Cal. *Orn.*, *Oöl.*, *Fungi.* Ex. in *Orn.*

1543. JONES, Rev. C. M., Eastford, Conn. *Orn.*, *Oöl.* Coll. Ex.

1544. JONES, GEO. W., Danville, Ill. *Micros.*

1545. JONES, HOWARD E., A. M., M. D., Circleville, O. *Orn.*, *Oöl.*, *Gen. Nat. Hist.*, *Micros.*, *Physiol.*, *Histol.*, Coll. Ex.

1546. JONES, HUGH LLOYD, Victoria, B. C. *Ferns.* Coll.

1547. JONES, H. T., Rochester, N. Y. *Orn.*, *Oöl.* Coll. Ex.

1548. JONES, JOHN P., Keytesville, Chariton Co., Mo. *Archæo.: Implements of Iron Ore.* Coll. Ex.

1549. JONES, J. MATTHEW, Halifax, N. S. *N. A. and W. I. Marine Conchol.* Coll. Ex.

1550. JONES, JOSHUA, M. D., Denison, Grayson Co., Tex. *Orn.* Coll.

1551. JONES, MARCUS E., Grinnell, Iowa. *Bot.*, *Geol.*, *Orn.*, *Oöl.*, *Ent.* Coll. Many rare plants for exchange.

1552. JONES, RICHARD W., Prof. Univ., Oxford, Miss. *Nat. Hist.* Coll. Ex.

1553. JONES, WM. L., Lebanon, Ill. *Orn.*, *Mam.*, *Ichth.*, *Reptiles.* Coll. Ex.

1554. JORDAN, DAVID S., M. D., Prof. Nat. Hist., Butler Univ., Irvington, Ind. *Fishes*, *Birds*, *Reptiles*, *Bot.*, *Geog. Distrib.* Ex. *Fishes.*

1555. JORDAN, Mrs. SUSAN BOWEN, Irvington, Ind. *Bot.: Ferns*, *Algæ*; *Ichth.*, *Orn.*, *Mam.*, *Reptiles.* Coll. Ex.

1556. JUDGE, CHAS. R., N. W. cor. Sixth & Mound Sts., Cincinnati, O. *Con.*, *Coleoptera.* Ex.

1557. JUDGE, J. F., M. D., N. W. cor. Sixth & Mound Sts., Cincinnati, O. *Con.* Coll. Ex.

1558. JULICH, WILHELM, 157 W. 32nd St., New York City. *Ent.: Coleoptera.* Coll.

1559. JULIEN, ALEXIS A., Columbia Coll., New York City. *Chem. Geol.*, *Lithol.*, *Micros.* Coll. Ex.

1560. JUSTICE, A. R., 319 No. 33rd St., Phila., Pa. *Orn.*, *Oöl.* Coll. Ex.

1561. JUSTIN, J. T., Newburg, N. Y. *Micros.*

1562. KACHLER, F., A. B., Bushnell, McDonough Co., Ill. *Min.*, *Geol*, *Archæo.* Coll. Ex.

1563. KASSUBE, J. C., B. S., 1121 Fourth St. S. E., Minneapolis, Minn. *Bot.*, *Geol.*, *Ethnol.* Coll. Ex.

1564. KAUFMANN, FERDINAND, jr., Muscatine, Iowa. *Coleoptera.* Coll. Ex.

1565. KAYE, JOHN B., Clifton House, Morris, Grundy Co., Ill. *Fossil Flora of Grundy Co. Coal Measures.* Coll. Ex.

1566. KEEN, WM. W., 1729 Chestnut St., Phila., Pa. *Anat., Micros.* Coll. Ex.

1567. KEENEY, Miss M. J., LeRoy, Genesee Co., N. Y.

1568. KEEP, Prof. JOSIAH, Curator of Con., Cal. Acad. of Sciences, Alameda, Cal. *Con., Invert. Palæo.* Coll. Ex.

1569. KEHR, CYRUS, Sterling, Whitesides Co., Ill. *Bot., Tax.* Coll. Ex.

1570. KEIGHTLEY, Mrs. E. R., Louisville, Ky. *Palæo.* Coll.

1571. KEIM, EDWARD T., Dubuque, Iowa. *Geol., Orn.* Coll. Ex.

1572. KELLERMAN, WM. A., Prof. State Normal School, Oshkosh, Wis. (Now in Europe.) *Bot.* Coll. Ex.

1573. KELLICOTT, D. S., 119 14th St., Buffalo, N. Y. *Algæ, Ent., Micros.* Coll.

1574. KELLOGG, ALBERT, M. D., 2132 O'Farrell St., San Francisco, Cal. *Bot., Micros., Geog. Distrib., Orn., Reptiles, Amphibians, Ichth., Lepidoptera, Coleoptera, Crustacea, Mollusks, Radiates.* Coll. Ex.

1575. KELLOGG, H. F., Box 210, Boston, Mass. *Micros.*

1576. KELLOGG, I. H., 86 7th St., Troy, N. Y. *Micros.*

1577. KELLOGG, JUSTIN, Troy, N. Y. *Min., Emb.* Coll.

1578. KELLOGG, J. H., M. D., Battle Creek, Mich. *Animal and Vegetable Histology.* Coll. Ex.

1579. KELLEY, HOWARD A., 323 So. 17th St., Phila., Pa. *Comp. Anat. of Vert.*

1580. KELSEY, CHARLES A., Theresa, Jefferson Co., N. Y. *Palæo., Geol., Min.* Coll. Ex.

1581. KENDALL, THEO. A., Reading, Pa. *Min.* Coll. Ex.

1582. KERR, Prof. J. H., Colorado Springs, Colo. *Palæo., Geol., Min., Invert. Emb.* Coll. Ex.

1583. KERR, W. C., State Geologist, Raleigh, N. C. *Geol.* Coll. Ex.

1584. KERSTING, RUDOLPH, Yonkers, N. Y. *Bot., Min., Coleoptera, Lepidoptera, Diptera.* Coll.

1585. KERVEY, H. R., Ph.G., Box 190, West Chester, Pa. *Archæo., Ethnol.* Coll. Ex.

1586. KILBORNE, FRED L., Kelloggsville, Cayuga Co., N. Y. (Now at Cornell Univ., Ithaca, N. Y.) Coll. Ex.

1587. KILGORE, WM., Minneapolis, Minn. *Ent.*, *Micros.* Coll. Ex.

1588. KILIAN, ED. AUG., 274 Genesee St., Buffalo, N. Y. *Anthro.*, *Con.* Ex.

1589. KILLEBREW, J. B., Com. of Agr., Statistics and Mines, Nashville, Tenn. *Geol.*, *Min.* Coll.

1590. KILMAN, ALVA H., Stamford, Welland Co., Ontario, Can. *Ent.* Coll. Ex.

1591. KIMBALL, FRANK B., M. D., Reading, Mass. *Micros.*

1592. KIMBALL, FRANK H., Rockford, Ill. *Invert. Palæo.*, *Gen. Biol.* Coll. Ex.

1593. KIMBALL, J. P., Century Club, 109 E. 15th St., New York City; Prof. Geol., Lehigh Univ., Bethlehem, Pa. *Geol.*, *Metall.*

1594. KING, A. F. A., M. D., Washington, D. C. *Micros.*

1595. KING, CLARENCE, U. S. Geologist, 23 Fifth Ave., New York City. *Geol.*

1596. KING, F. H., Teacher of Nat. Sci., River Falls, Pierce Co., Wis. *Orn.*

1597. KING, JOHN, M. D., 9th & Elm Sts., Cincinnati, O. *Micros.*

1598. KING, Rev. J. D., Vineyard Grove, Mass. *Lithol.*, *Mollusks*, *Micros.* Coll. Ex.

1599. KING, LAURETTA A., Wakefield, Lancaster Co., Pa. *Bot.*, *Min.* Coll.

1600. KING, Mrs. MARY B. A., Rochester, N. Y. *Con.*

1601. KING, ROBERT, M. D., Kalamazoo, Mich. *Micros.*

1602. KINGSBURY, HOWARD, 11th & Walnut Sts., Phila., Pa. *Lithol.*, *Ent.* Coll. Ex.

1603. KINGSLEY, J. S., Providence, R. I. *Invertebrates.* Spec. — *Crustacea.* Coll. Ex.

1604. KINNE, C. MASON, 422 California St., San Francisco, Cal. *Micros.*

1605. KINNER, HUGO, M. D., 1517 So. 7th St., St. Louis, Mo. *Palæo.*, *Anthro.*, *Vert.*, *Ent.* Coll.

1606. KINZER, GEORGE H., 233 E. Walnut St., Lancaster, Pa. *Orn.*, *Mam.* Coll. Ex.

1607. KIRBY, S. H., Glenville, Cuyahoga Co., O. *Micros.*

1608. KIRK, HYLAND C., Phelps, Ontario Co., N. Y. *Gen. Biol.*, *Palæo.*

1609. KIRK, ISAAC S., Fremont, Pa. *Min.*, *Archæo.* Coll. Ex.

1610. KIRLEY, C. P., M. D, Lowville, Lewis Co., N. Y. *Orn.*, *Oöl.* Coll. Ex.

1611. KIRSCH, Prof. ALEX., Watertown, Wis. *Bot.*, *Palæo.*, *Geol.*, *Gen.Biol.*, *Orn.*, *Osteol.*, *Ent.*

1612. KLEEBERGER, Prof. GEO. R., San Diego, Cal. *Bot.*: *Zoöl.*: *Bryology and Arachnida.* Coll. Ex.

1613. KLEINA, CHAS. B., 274 8th Ave., New York City. *Micros.*

1614. KNAPP, BUEL, Mc Gregor, Iowa. *Fossils and Minerals.* Coll. Ex.

1615. KNAPP, FRED N.. Plymouth, Mass. *Orn.*

1616. KNAPP, HARRISON, M. D., New York City. *Micros.*

1617. KNAPP, JAMES, M. D., 345 East Main St., Louisville, Ky. *Geol.*, *Palæo.*, *Archæo.* Coll.

1618. KNAPP, LYMAN E., Middlebury; Vt. *Palæo.*, *Min.* Coll.

1619. KNEELAND, SAMUEL, A.M., M. D., Boston, Mass. *Ethnol.*, *Gen.Biol.*, *Vert.*

1620. KNIGHT, ELIZABETH G., 1235 3rd Ave., New York City. *Bot.* Coll. Filices for exchange.

1621. KNIPE, Rev. S. W., Delaware Water Gap, Pa. *Phæn. Bot.*, *Min.* Coll.

1622. KNOTT, W. T., Lebanon, Ky. *Ferns*, *Invert.Palæo.*, *Geol.*, *Land and F. W. Mollusks.* Coll. Ex.

1623. KNOWLES, HOMER M., Milnersville, Guernsey Co., O. *Geol.*, *Min.* Coll.

1624. KNOWLTON, F. H., Brandon, Vt. *Orn.*, *Oöl.*, *Local Botany and Entomology.* Coll. Ex.

1625. KNOWLTON, W. J., S. B., 168 Tremont St., Boston, Mass. *Geol.*, *Orn.*, *Min.*

1626. KNOX, S. B. P., A. M., M. D., Santa Barbara, Cal. *Algæ*, *Micros.*, *Ent.* Coll. Ex.

1627. KOCH, CHAS., 502 Diamond St., Phila., Pa. *Coleoptera.* Coll. Ex.

1628. KOCH, J. F., M. D., Guth's Station, Lehigh Co., Pa. *Bot.*, *Orn.*, *Mam.* Coll. Ex.

1629. KOCSIS, ALEXANDER, Tullahoma, Coffee Co., Tenn.

1630. KOEHLER, FREDERIC, Waterbury, Conn. *Tax.*, *Orn.* Coll.

1631. KOST, J., M. D.; LL.D., Prof. of Nat. Hist. and Geol., Adrian Coll., Adrian, Mich. *Nat. Hist.*, *Geol.* Coll. Ex.

1632. KRESS, FRED., Rockville, Conn. *Oöl.*

1633. KROUT, A. F. K., A. M., Coplay Boro., Lehigh Co., Pa. *Phæn.Bot.*, *Ferns*, *Min.* Coll. Ex. Plants from the South and West desired.

1634. KRUTTSCHNITT, J., Box 144, New Orleans, La. *Vegetable Physiol., Micros.*

1635. KUETZING, P., 490½ Main St., Montreal, Can. *Orn., Oöl., Tax., Ent.* Coll. Ex.

1636. KUHN, Miss M. L., Box 213, Peoria, Ill. *Phæn. Bot.* Coll. Ex.

1637. KUMLIEN, A. L., Busseyville, Wis. *Orn., Ichth., Ent.*

1638. KUMLIEN, THURE, Albion, Wis. *Bot.*

1639. KUMMER, ALFRED, A.M., Sup't City Schools, South Bend, Ind. *Orn.* Coll. Ex.

1640. KUNZ, GEO. F., 72 First St., Hoboken, N. J. *Palæo., Geol., Min., Archæo., Ethnol., Mollusks.* Coll. Ex.

1641. KUNZE, R. E., M. D., 606 3rd Ave., N. Y. City. *Med. Bot.* Coll. Ex. genera Cereus and Phyllocactus particularly.

1642. LACOE, R. D., Pittston, Luzerne Co., Pa. *Min., Palæo.* Fossils of the Coal Measures especially desired. Coll. Ex.

1643. LAFLAMME, Prof. J. C. K., D. D., Laval Univ., Quebec, Can. *Bot., Min., Geol.* Coll.

1644. LAKES, Rev. ARTHUR, State School of Mines, Golden, Colo. *Geol., Nat. Hist.* Coll.

1645. LAMB, W. F., Holyoke, Mass. *Tax., Orn., Oöl., Archæo.* Coll. Ex.

1646. LAMBORN, GEO. S., Liberty Square, Lancaster Co., Pa. *Geol., Min., Palæo., Con.* Coll. Ex.

1647. LA MUNYON, I. W., North Platte, Lincoln Co., Neb. *Bot., Geol., Palæo., Ent., Mollusks.* Coll. Ex.

1648. LAND, THOMAS, Lancaster, Pa. *Phæn. Bot.* Coll.

1649. LANDIS, HENRY G., M. D., Columbus, O. *Lepidoptera, Coleoptera.* Coll. Ex.

1650. LANDRETH, O. H., Albany, N. Y.

1651. LANGDON, F. W., Madisonville, Hamilton Co., O. *Orn., Mam., Comp. Anat., Ent.* Coll.

1652. LANGGUTH, J. G., Chicago, Ill. *Micros.* Ex.

1653. LANPHERE, ALVIN T., Coldwater, Mich. *Geol., Archæo.* Coll. Ex.

1654. LANTZ, P. A., Saegersville, Pa. *Phæn. Bot., Ferns.* Coll. Ex.

1655. LA PIERRE, ELIE H., 32 River St., Cambridgeport, Mass. *Bot.*

1656. LARISON, CORNELIUS W., M. D., Prof. Zoöl., Univ. Lewisburg, Pa.; Principal of Acad. Sci. and Art, Ringoes, N. J. *Zoöl., Biol.* Coll. Ex. *Fishes.*

1657. LARKIN, Prof. E. P., Alfred Univ., Alfred Centre, N. Y. *Fungi*, *Invert. Palæo.*, *Geol.*, *Gen. Biol.*, *Invert. Emb.*, *Vert.*, *Mollusks*, *Radiates*, *Sponges*. Coll. Ex.

1658. LARNED, J. A., Buffalo, N. Y. *Micros.*

1659. LATHROP, JAS. C., Box 848, Bridgeport, Conn. *Min.*, *Palæo.* Coll. Ex.

1660. LAWRENCE, F. W., Saratoga Springs, N. Y. *Orn.* *Oöl.* Coll. Ex.

1661. LAWRENCE, GEO. N., 45 E. 21st St., New York City. *Orn.*

1662. LAWRENCE, JOHN L., 18 Irving Place, New York City. *Orn.* Coll.

1663. LAWRENCE, N. T., 45 E. 29th St., New York City. *Orn.* Coll. Ex.

1664. LAWRENCE, ROBERT, Flushing, L. I., N. Y. *Orn.*, *Oöl.*, *Ent.* Coll. Ex.

1665. LAWSON, Prof. GEORGE, Halifax, N. S. *Bot.*, *Geol.*

1666. LEA, ISAAC, LL. D., 1622 Locust St., Phila., Pa. *Geol.*, *Min.*, *Mollusks.* Coll.

1667. LEACH, HATTIE S., Springfield, Mo. *Bot.*, *Min.* Coll. Ex..

1668. LEAROYD, Miss H., Terry Hall, Lake Forest, Lake Co., Ill. *Micros.*

1669. LEAVITT, H. H., Santa Barbara, Cal. *Gen. Nat. Hist.*, *Con.*, *Orn.*

1670. LE BARON, J. F., Lynn, Mass. *Min.*, *Archæo.*, *Orn.* Coll. Ex.

1671. LECHEVALIER, ALFRED, 434 St. Mary St., Montreal, Can. *Vertebrates*, *Invertebrates*, *Ent.*, *Crustacea.* Coll. Ex.

1672. LE CONTE, JOHN L., M. D., 1625 Spruce St., Phila., Pa. *Coleoptera.* Coll.

1673. LE CONTE, Prof. JOSEPH, Univ. of Cal., Berkeley, Cal. *Geol.*, *Gen. Biol.*

1674. LEE, JOHN W., 44 Pearl St., Baltimore, Md. *Min.* Coll. Ex.

1675. LEE, LESLIE A., Instructor in Nat. Hist., Bowdoin Coll., Brunswick, Me. *Gen. Biol.* Coll. Ex.

1676. LEE, WILLIAM F., West Chester, Pa. *Orn.* Coll.

1677. LEE, WILLIAM M., Greene, Pa. *Bot.*, *Min.* Coll. Ex.

1678. LEE, Dr., Pennsylvania Ave., between 20th & 21st Sts., Washington, D. C. *Micros.*

1679. LEGGETT, WM. H., 54 E. 81st St., New York City. *Bot.: Lecheas.* Ex.

1680. LEGRO, JOHN I., New Britain, Conn. *Min.* Coll. Ex.
1681. LEIBERG, JOHN, Seney, Iowa. *Bot., Ent.* Coll. Ex.
1682. LEIDY, Dr. JOSEPH, Phila., Pa. *Rhizopods.*
1683. LEMMON, Prof. J. G., Botanical Explorer and Writer, Sierraville, Sierra Co., Cal. *Botanical Microscopy and Instruction; Ent., Gen. Nat. Hist.* Coll.
1684. LEMMON, THEO. G., Perryville, Mo. *Orn.* Coll. Ex.
1685. LEMMON, WM. L., Warrensburg, Mo. *Ent.* Coll. Ex.
1686. LEMOINE, J. M., Pres. Lit. and Hist. Soc., Quebec, Can. *Orn.* Coll. Ex
1687. LENG, CHAS. W., B. S., Box 3565, New York City. *Coleoptera.* Spec. — *Cerambycidæ.* Coll. Ex.
1688. LENNEBACKER, Miss HELEN, Santa Barbara, Cal. *Algæ.*
1689. LENNON, W. H., State Normal School, Brockport, N. Y. *Phæn.Bot., Ferns, Mosses.* Coll. Ex.
1690. LEONHARD, ALEXANDER, Geologist and Mining Engineer, Washington Univ., St. Louis, Mo. *Microscopic Lithology.* Coll. Ex.
1691. LEONHARD, W. H., M. D., Minneapolis, Minn. *Ferns.* Coll.
1692. LEROY, P. V., Curator Columbia Coll., New York City. *Bot.* Coll. Ex.
1693. LESLEY, Prof. J. P., State Geologist, 1008 Clinton St., Phila., Pa. *Geol.*
1694. LESQUEREUX, LEO, Columbus, O. *Bot., Bryol., Palæo.*
1695. LETTERMAN, GEO. W., Allenton, Mo. *Phæn.Bot., Ferns, Anthropol.: Archæo.; Ent.* Coll. Ex.
1696. LEVETTE, G. M., M. D., Indianapolis, Ind. *N. A. Conchology, Herpetology and Coleoptera.* Coll. Ex.
1697. LEWIS, B., Lockport, Niagara Co., N. Y. *Geol.*
1698. LEWIS, C. C., Plainville, Conn. *Min.* Coll. Ex.
1699. LEWIS, C. W., M. D., Minneapolis, Minn. *Zoöl.*
1700. LEWIS, HENRY C., A. M., Germantown, Phila., Pa. *Min., Geol.* Coll. Ex.
1701. LEWIS, JAMES, Mohawk, N. Y. *Mollusks.* Coll. Ex.
1702. LEWIS, L. L., Copenhagen, Lewis Co., N. Y. *Palæo., Archæo., Min., Oöl., Bot.*
1703. LEWIS, M. C., 255 1-2 Annunciation St., New Orleans, La. *Ent.*
1704. LIAUTARD, A. F., M. D., 141 W. 54th St., New York City. *Micros.*
1705. LIBHART, Hon. J. J., Marietta, Pa. *Orn., Ichth.* Coll. Ex.

1706. LILIENTHAL, H., Box 1143, Saratoga Springs, N. Y. *Oöl., Lepidoptera.* Coll. Ex.

1707. LILLIA, C., 1087 Fulton St., New York City. *Micros.*

1708. LINDAHL, JOSUA, Ph.D., Prof. Nat. Hist., Augustana Coll., Rock Island, Ill. *Gen. Zoöl., Palæo.* Coll. Ex.

1709. LINDEMUTH, A. C., Richmond, Ind. *Invert. Palæo., Geol.* Coll. Ex.

1710. LINDHEIMER, FERDINAND, New Braunfels, Tex. *Bot.*

1711. LINDLEY, CLARENCE T., M. D., 326 W. 12th St., Davenport, Iowa. *Palæo., Archæo., Mollusks.* Coll. Ex.

1712. LINNEY, W. M., Harrodsburg, Ky. *Ferns, Invert. Palæo., Geol., Lithol., Archæo.* Coll. Ex.

1713. LINTNER, J. A., State Mus. of Nat. Hist., Albany, N. Y. *Ent.: Lepidoptera.* Coll.

1714. LITTLE, GEORGE, State Geologist, Atlanta, Ga. *Geol.*

1715. LITTON, Prof. A., 2220 Eugenia St., St. Louis, Mo. *Min., Micros.* Coll.

1716. LLOYD, C. G., Newport, Ky. *Bot.* Coll. Ex.

1717. LOCHSCHMIDT, Prof. C., St. Vincent's Coll., Beatty, Pa. *Phæn. Bot.*

1718. LOCKE, C. E., Atlanta, Ga. *Lithol.* Coll.

1719. LOCKE, LEWIS, San Francisco, Cal. *Orn.*

1720. LOCKE, W. M., Agent St. Louis & S.E. R.R., Marshall's Ferry, White Co., Ill.

1721. LOCKHART, OLIVER B., Lake George, N. Y. *Orn., Oöl.* Coll.

1722. LOCKINGTON, WM. NEALE, 622 Ellis St., San Francisco, Cal. *Marine Zoölogy of Pacific Coast.* Coll. Ex.

1723. LOCKLING, L. L., San Diego, Cal. *Philology.*

1724. LOCKWOOD, Prof. SAMUEL, Ph.D., Freehold, N. J. *Phæn. Bot., Archæo., local Geol. and Zoöl., Micros.* Colls.

1725. LOFTUS, JOHN P., Dorchester District, Boston, Mass. *Bot., Palæo.: Plants; Geog. Distrib., Orn., Ichth., Reptiles.*

1726. LOITLOFF, H., Greenville, N. J. *Lepidoptera.* Coll. Ex.

1727. LONG, Judge THOMAS B., Terre Haute, Ind. *Min., Palæo., Archæo.* Coll. Ex.

1728. LONGFELLOW, R. K., 23 South St., Portland, Me. *Orn., Oöl.* Coll.

1729. LOOMIS, J. C., Jeffersonville, Ind. *Geol., Micros.* Coll. Ex.

1730. LOOMIS, LEVERETT M., Chester, S. C. *Orn.* Coll.
1731. LORANDI, H. R., Meadville, Pa. *Orn.*, *Ent.* Coll. Ex.
1732. LORD, BENJ., M. D., New York City. *Micros.*
1733. LORD, JAMES W., Box 8, Gildersleeve's Landing, Conn. *Orn.*, *Oöl.* Coll. Ex.
1734. LORQUIN, E. F., 410 Kearney St., San Francisco, Cal. *Vert.*, *Ent.*, *Crustacea*, *Mollusks*, *Radiates*. Coll. Ex.
1735. LOUGHRIDGE, R. H., Ph.D., Ass't State Geologist, Box 404, Atlanta, Ga. *Geol.* Coll. Ex.
1736. LOVE, EDWARD G., Ph. D., Columbia Coll., New York City. *Min.*
1737. LOVE, JAMES, Burlington, Iowa. *Invert. Palæo.* Coll. Ex. (Crinoids only).
1738. LOVE, SAMUEL G., Jamestown, N. Y. *Orn.*, *Min.*, *Articulates.* Coll. Ex.
1739. LOVELAND, MARY A., Mich. Seminary, Kalamazoo, Mich. *Phæn. Bot.* Coll.
1740. LOW, CHARLES F., Sec'y Marietta & Cincinnati R. R., Box 47, Cincinnati, O. *Palæo.; Ent : Lepidoptera; Archæo.: Indian Pottery.* Coll. Ex.
1741. LOWE, FRANCIS A., Smithsonian Inst., Washington, D. C. *Min.*, *Geol.*
1742. LOWE, F. C., Dunnville, Ontario, Can. *Ent.*
1743. LOWN, CLARENCE, Poughkeepsie, N. Y. *Ferns.* Ex.
1744. LOWRIE, J. R., Warriorsmark, Pa. *Bot.*
1745. LUCAS, FREDERIC A., 2 College Ave., Rochester, N. Y. *Mam.*, *Orn.*, *Osteol.*
1746. LUDWIG, OTTO, L. B. 381, San Antonio, Tex. *Cactaceæ.*
1747. LUEBRO, W. D., 412 Lake St., Cleveland, O. *Micros.*
1748. LUFKIN, FRANK, Pigeon Cove, Rockport, Mass. *Bot.* Ex.
1749. LUGGER, OTTO, P.D., Maryland Acad. Sci., and Druid Hill Park Museum, Baltimore, Md. *Ichth.*, *Coleoptera.* Coll. Ex.
1750. LYKINS, WM. H. R., Kansas City, Mo. *Palæo.*, *Geol.* Coll.
1751. LYLE, A. T., Millersport, Fairfield Co., O. *Orn.*, *Archæo.* Coll.
1752. LYLE, DAVID A., Lieutenant of Ordnance, U. S. A., National Armory, Springfield, Mass. *Orn.*, *Ethnol.*, *Philol.* Coll.

1753. LYMAN, H. H., 74 McTavish St., Montreal, Can. *Ent.: Lepidoptera; Geol., Bot.*

1754. LYMAN, THEODORE, Brookline, Mass. *Radiata. Pisciculture.*

1755. LYON, V. W., Jeffersonville, Ind. *Geol., Palæo.* Coll. Ex.

1756. LYONS, Prof. A. B., M. D., 33 Lafayette Ave., Detroit, Mich. *Ferns, Mollusks.* Coll Ex.

1757. MACARTHUR, C. L., Troy, N. Y. *Geol.* Coll. Ex.

1758. MACFADDEN, F. P., St. Vincent's Abbey, Westmoreland Co., Pa.

1759. MACFARLANE, JAMES, Ph.D., L. B. 39, Syracuse, N. Y. *Local Geol.*

1760. MACKIE, GEORGE, M. D., Attleborough, Mass. *Bot., Ent.* Coll. Ex.

1761. MACKINTOSH, JAMES B., E. M., C. E., 55 Garden St., Hoboken, N. J. *Min.* Coll. Ex.

1762. MACLOSKIE, GEO., LL.D., Princeton, N. J. *Bot., Gen. Biol.* Coll.

1763. MACOUN, Prof. JOHN, A. M., Belleville, Ontario, Can. *Bot.: Canadian Plants of all orders.*

1764. MAISCH, J. M., Prof. of Materia Medica and Botany, Phila. Coll. of Pharmacy, 145 No. 10th St., Phila., Pa. *Phæn. Bot., Ferns.* Coll.

1765. MAKEPEACE, M. D., B. C. E., Ithaca, N. Y. *Geol., Palæo.* Coll. Ex.

1766. MALLET, Prof. J. W., F. R. S., University of Virginia, Albemarle Co., Va. *Min.* Coll. Ex.

1767. MALONE, D. R., A. M., M. D., Edinburgh, Johnson Co., Ill. *Palæo.*

1768. MANIGAULT, G. E., Curator Mus. Nat. Hist., Charleston, S. C. *Comp. Osteol.* Coll. Ex.

1769. MANN, B. PICKMAN, Editor of "Psyche," Sec'y of Cambridge Entomological Club, Cambridge, Mass. *Bibliography and Economic Entomology.* Coll.

1770. MANN, C. A., 37 Myrtle Ave., Brooklyn, N. Y.

1771. MANN, Rev. CAMERON, Watkins, Schuyler Co., N. Y. *Con.* Coll.

1772. MANN, CHARLES L., 27 Erie St., Milwaukee, Wis. *Orn., Oöl., Ichth.; Archæo., particularly the period of copper implements.* Correspondence invited.

1773. MANSFIELD, F. A., Camden, Knox Co., Me. *Bot., Ent., Geol., Min., Zoöl.* Coll. Ex.

1774. MANSFIELD, Prof. J. M. Mt. Pleasant, Iowa. *Min.*, *Bot.*, *Zoöl.*, *Geol.*, *Archæo.* Coll. Ex.

1775. MARCOU, J. B., 42 Garden St., Cambridge, Mass. *Geol.*, *Palæo.*, *Lithol.*, *Geog. Distrib.* Coll.

1776. MARCY, OLIVER, Evanston, Ill. *Bot.*, *Geol.*, *Zoöl.*

1777. MARDEN, GEO. H, 7 Parker St., Charlestown, Mass. *Geol.* Coll.

1778. MARK, EDWARD L., Cambridge, Mass. *Invert. Emb.*, *Hemiptera*, *Homoptera*, *Worms.*

1779. MARSH, DON C., Milford Centre, Union Co., O. *Geol.*, *Min.*, *Archæo.* Coll. Ex.

1780. MARSH, Rev. DWIGHT WHITNEY, D. D., Haydenville, Mass. *Orn.*, *Oöl.* Coll. Ex.

1781. MARSH, J. W., Prof. Pacific Univ., Forest Grove, Oregon. *Bot.* Coll. Ex.

1782. MARSH, O. C., Prof. Yale Coll., New Haven, Conn. *Palæo.*, *Comp. Anat.*

1783. MARSH, PHILIP, Aledo, Ill. *Archæo.*, *Palæo.*, *Mollusks.* Land and Fresh-water Shells for exchange.

1784. MARSH, W. A., Aledo, Ill. *Bot.*, *Archæo.*, *Palæo.*, *Geol*, *Min.*, *Mollusks.* Spec.—*Land and Fresh-water Shells and Carboniferous Fossils.* Coll. Ex.

1785. MARSHALL, DYER M., 170 Water St., Oswego, N. Y. *Orn.* Coll. Ex.

1786. MARSHALL, JOHN P., Prof. of Min. and Geol., Tufts Coll., College Hill, Middlesex Co., Mass. *Lithol.*, *Micros.*, *Gen. Biol.* Coll. Ex.

1787. MARTIN, Prof. DANIEL S., 236 W. 4th St., New York City. *Palæo.*, *Min.*, *Geol.*, *Mollusks.* Coll.

1788. MARTIN, EDW., Box 59, Kenosha, Wis. *Micros.*

1789. MARTIN, GEO. H., Bridgewater, Mass. *Bot.*, *Geol.*, *Min.*

1790. MARTIN, Prof. H. NEWELL, Johns Hopkins Univ., Baltimore, Md.

1791. MARTIN, J. McC., Ph.D., Prof. Nat. Sci., Ohio Univ., Athens, O.

1792. MARTIN, J., Ottawa, Can. *Bot.*

1793. MARTINDALE, I. C., Camden, N. J. *Bot.* Coll. Ex.

1794. MARVIN, D. S., Watertown, N. Y. *Horticulture.* *Geol.*, *Min.*

1795. MARVIN, J. B., B. Sc., M. D., 153 West Chestnut St., Louisville, Ky. *Pathol.*, *Micros.* Coll. Ex.

1796. MARX, GEO, Nat. Hist. Artist, Dep't of Agriculture, Washington, D. C. *Arachnoidea.* Coll. Ex.

1797. MASON, EDWARD J., Marblehead, Mass. *Geol., Min., Zoöl., Bot., Con., Sponges.* Coll. Ex.
1798. MASON, N. N., Providence, R. I. *Micros.*
1799. MASON, O. G., Official Photographer to the Dep't of Public Charities and Correction, Bellevue Hospital, New York City. *Micros., Micro-Photog.* Spec. — *Application of Photography to the illustration of Science.* Coll.
1800. MASON, O. T., Washington, D. C. *Anthro.*
1801. MASON, Dr. WM H., Norwich, Conn. *Micros.*
1802. MATHER, FRED, 48 South St., Newark, N. J. *Ichth.*
1803. MATHEWS, FRANK, Prin. Pub. Sch., Farmington, Fulton Co., Ill. *Geol., Min.* Coll.
1804. MATLACK, J. HOOPES, West Chester, Pa. *Oöl.* Coll. Ex.
1805. MATSON, E. A., Greencastle, Ind. *Micros.*
1806. MATTESON, F. S., M. D., Coquille City, Coos Co., Oregon. *Tax* Ex.
1807. MATTHEW, GEO. F., St. John, N. B., Can. *Phæn. Bot., Ferns, Palæo., Geol., Min., Geog. Distrib., Archæo., Mollusks.* Coll. Ex.
1808. MAXWELL, Dr. A. W., Meadville, Pa. *Ent.* Coll. Ex. *Lepidoptera* and *Coleoptera.*
1809. MAXWELL, MARIE A., Meadville, Pa. *Ent.* Coll. Ex. more especially *Lepidoptera* and *Coleoptera.*
1810. MAXWELL, Mrs. S. B., State Librarian, Des Moines, Iowa. Museum Coll. Ex.
1811. MAXWELL, W. R., Palestine, Anderson Co., Tex. *Geol.* Coll.
1812. MAY, A. M., Waukon, Iowa. *Geol., Archæo.* Coll. Ex.
1813. MAY, ENOCH, sen., Burlington, Iowa. *Geol., Archæo.* Coll.
1814. MAYCOCK, Prof. M. M., Buffalo, N. Y.
1815. MAYER, ALFRED M., Stevens Inst. Technol., Hoboken, N. J. *Experimental Physiology.*
1816. MAYER, FRANK H., Box 248, Ashland, Schuylkill Co., Pa. *Gen. Nat. Hist., Oöl., Min., Geol.* Coll Ex.
1817. MAYNARD, C. J., Newtonville, Mass. *Orn., Oöl., Gen. Zoöl.* Coll. Ex.
1818. MAYNARD, Miss MARY, Lyons, Iowa. *Bot.*
1819. MAYO, E. R., 35 Upton St., Boston, Mass. *Mollusks.* Coll. Ex.

1820. MAZYCK, WM. G., Charleston. S. C. *Mollusks.* Coll. Ex.
1821. MCADAMS, Hon. WM., Otterville, Jersey Co., Ill. *Palæo., Archæo.* Coll. Ex.
1822. MCALLAN, WM., Ghent, Carroll Co., Ky. *Ent.*
1823. MCALLISTER, T. H., 49 Nassau St., New York City. *Micros.*
1824. MCALLISTER, W. Y., 728 Chestnut St., Phila., Pa. *Micros.*
1825. MCBRIDE, A. S., Freeland, De Kalb Co., Ill. *Coleoptera.* Coll. Ex.
1826. MCBRIDE, R. W., Waterloo, Ind. *Archæo., Ethnol., Ent.* Coll. Ex.
1827. MCBRIDE, SARA J., Mumford, Monroe Co., N. Y. *Ent.*
1828. MCBRIDE, T. H., Iowa City, Iowa. *Bot., Palæo.* Coll. Ex.
1829. MCCALL, Mrs. MARY T., 113 5th St., Troy, N. Y. *Bot.* Coll. Ex.
1830. MCCALLUM, G. A., M. D., Dunnville, Ontario, Can. *Orn.* Coll. Ex.
1831. MCCLUNG, CALVIN M., Knoxville, Tenn. *Min.* Coll.
1832. MCCOMBS, WM., Magnolia, Putnam Co., Ill. *Palæo., Geol.* Coll.
1833. MCCONNELL, J. B., Prof. of Bot. and Zoöl., Univ. Bishop's Coll., 177 Bleury St., Montreal, Can. *Bot., Micros., Gen. Biol.* Coll. Ex.
1834. MCCOOK, HENRY C., Acad. Nat. Sci., Phila., Pa.
1835. MCCRADY, Prof. JOHN, Sewanee, Tenn. *Gen. Biol., Emb., Radiates.*
1836. MCCREERY, J. M., Akron, O. *Palæo.* Coll. Ex.
1837. MCCUTCHEN, A. R., Ass't State Geologist, LaFayette, Walker Co., Ga. *Geol.*
1838. MCDANIEL, Rev. BENJ. F., Exeter, N. H. *Min.* Coll. Ex.
1839. MCDONALD, M., Va. Mil. Inst., Lexington, Rockbridge Co., Va. *Geol., Min., Ent., Con.* Coll. Ex.
1840. MCGEE, W. J., Farley, Iowa. *Superficial Geol., Archæo.* Coll. Ex.
1841. MCELROY, Prof. G. B., Adrian, Mich.
1842. MCGUIN, GEO. B., Grinnell, Poweshiek Co., Iowa. *Ent.*
1843. MCILWRAITH, THOMAS, Hamilton, C. W. *Orn.*
1844. MCKAY, CHAS. L., Appleton, Wis. *Bot., Orn., Ichth.*

1845. McKAY, JOSEPH, 24 Liberty St., Troy, N. Y. *Crypt. Bot., Micros.* Coll. Ex.
1846. McKEEVER, Prof. I. W., Adrian, Mich. *Nat. Hist.*
1847. McKIM, Rev. HASLETT, Newburgh, N. Y. *Bot.*
1848. McLAUGHLIN, Prof. WM. M., Southington, Conn. *Bot., Geol., Min., Micros., Archæo.* Coll. Ex.
1849. McLEOD, ROBERT R., Houlton, Me. *Orn.* Coll. Ex.
1850. McLENNAN, KENNETH, 745 Craig St., Montreal, Can. *Micros., Ent.* Coll. Ex.
1851. McWHORTER, TYLER, Aledo, Ill. *Geol., Palæo.* Coll. Ex.
1852. MEACHAM, CHAS. F., Springfield, Vt. *Micros.* Coll.
1853. MEAD, J. C., Bridgton, Me. *Orn., Oöl.* Ex.
1854. MEAD, S. B., M. D., Augusta, Hancock Co., Ill. *Bot.* Coll. Ex.
1855. MEAD, T. L., 674 Madison Ave., New York City. *Diurnal Lepidoptera of N. A. and Hesperidæ of the World.* Coll. Ex.
1856. MEAD, WALTER H., 310 W. 19th St., New York City. *Micros.*
1857. MEAMBER, Prof. JOSEPH, East St. Louis, St. Clair Co., Ill. *Orn., Oöl.* Coll. Ex.
1858. MEANS, Rev. ALEXANDER, A. M., M. D., D. D., LL.D., Fellow A. A. A. Sci., and Member of Am. Chem. Soc. of New York, Oxford, Ga. *Palæo., Geol., Min.*
1859. MEARNS, E. A., Highland Falls, Orange Co., N. Y. *Vert. Zoöl.* Coll. Ex.
1860. MEDLING, G. F., 28 Bond St., New York City.
1861. MEECH, Rev. WM. W., A. M., Vineland, N. J. *Geol., Ent.* Coll.
1862. MEEHAN, JOSEPH T., Germantown, Phila., Pa. *Phæn. Bot.* Coll. Ex.
1863. MEEHAN, THOMAS, State Botanist, Germantown, Phila., Pa. *Phæn. Bot., Ferns, Horticulture.* Coll.
1864. MEES, C. L., M. D., Louisville, Ky. *Micros.*
1865. MEIGS, Prof. J. A., M. D., 1408 Spruce St., Phila., Pa. *Gen. Biol., Micros., Anthro., Histol of Vert.*
1866. MEINERTH, CARL, Newburyport, Mass. *Micros., Photog.*
1867. MELL, P. H., jr., A.M., C.& M.E., State Agricultural and Mechanical College, Auburn, Ala. *Palæo., Geol., Min., Bot., Zoöl.* Coll. Ex.
1868. MELLICHAMP, Dr. J. H., Bluffton, S. C. *Bot.*

1869. MENDENHALL, R. J., Minneapolis, Minn. *Ent.* Coll.
1870. MEPHAM, GEORGE S., 1025 Winter St., St. Louis, Mo. *Archæo., Min.* Coll. Ex.
1871. MERCER, FREDERIC W., M. D., Ill. Southern Hospital, Anna, Union Co., Ill. *Histol., Algæ, Micros.* Coll. Ex.
1872. MERCER, R. W., 292½ Wade St., Cincinnati, O. *Archæo., Min., Palæo., Numismatics, Am. History.* Coll. Ex.
1873. MERKEL, AUG., 13 Broadway, N. Y. City. *Ent.: Coleoptera of U. S.* Coll.
1874. MERKEL, G. H., M. D., 322 Shawmut Ave., Boston, Mass. *Gen. Micros.* Coll.
1875. MERRIAM, ANDREW B., jr., N. W. cor. 5th & Walnut Sts., Cincinnati, O. *Ent.* Coll. Ex.
1876. MERRIAM, C. HART, M.D., Locust Grove, Lewis Co., N. Y. *Zoöl., Comp. Anat.* Coll. Ex.
1877. MERRILL, FRANK O., Bradford, Mass. *Oöl.* Coll. Ex.
1878. MERRILL, HARRY, Bangor, Me. *Orn., Oöl.* Coll. Ex.
1879. MERRILL, JAMES C., Ass't Surgeon U. S. A., Fort Shaw, Montana Terr. *Orn.* Coll.
1880. MERRILL, J. WARREN, Cambridgeport, Mass. *Filices. Live Plants and Herbarium Specimens.* Ex.
1881. MERRIMAN, C. C., Rochester, N. Y. *Micros.* Coll. Ex.
1882. MERTON, Dr. ARTHUR, Phila., Pa. *Micros.*
1883. MERTZ, H. N., Steubenville, O. *Bot., Geol.* Coll. Ex.
1884. MESSENGER, F. LAWRENCE, Melrose Highlands, Mass. *Geol., Min.* Coll. Ex.
1885. METCALF, CHAS. T., 172 Westminster St., Providence, R. I. *Min.* Coll. Ex.
1886. METCALF, JAS. K., Silver City, Grant Co., New Mexico. *Geol., Bot.* Coll.
1887. METTAUER, A., M. D., Macon, Ga. *Bot., Geol., Micros., Coleoptera, Lepidoptera.* Coll. Ex.
1888. METZ, CHARLES L., M. D., Madisonville, Hamilton Co., O. *Archæo., Palæo.* Coll. Ex.
1889. MEYER, ABRAHAM, Cogan House, Lycoming Co., Pa. *Min., Geol.* Coll. Ex.
1890. MEYERS, J. H., Benton, Mono Co., Cal. *Min.* Coll. Ex.
1891. MEYNCKE, O. M., Brookville, Ind. *Archæo., Oöl.* Coll. Ex.

1892. MICHELS, JOHN, Box 3838, New York City. *Crypt. Bot., Micros., Emb., Histol. of Vert., Invertebrates.* Coll.

1893. MICHENER, EZRA, M. D., Toughkenamon, Pa. *Bot., Con.* Coll.

1894. MICKLEBOROUGH, JOHN, Cincinnati, O. *Palæo., Geol., Zoöl.* Coll. Ex.

1895. MIDDLETON, NETTIE H., Carbondale, Ill. *Ent.: Aphides; Micros.*

1896. MIELLEZ, A., Springfield, Mass. *Phæn. Bot., Crypt. Bot., Ferns, Mosses.* Coll. Ex.

1897. MIGNAULT, LOUIS D., 155 Bleury St., Montreal, Can. *Bot.: Phænograms, Ferns.* Coll. Ex.

1898. MILES, Prof. M., Lansing, Mich. *Zoöl.*

1899. MILGATE, WM. H., Biddeford Pool, Me. *Orn.: Sea Birds.* Coll.

1900. MILKE. Rev. P. H. S., Pekin, Ill. *Coral Fossils.*

1901. MILLER, ADOLPH W., M. D., 860 No. 5th St., Phila., Pa. *Phæn. Bot.*

1902. MILLER, EDWARD, Perrineville, Monmouth Co., N. J. *Phæn. Bot., Orn., Ent.* Coll.

1903. MILLER, E. S., Wading River, Long Island, N. Y. *Bot., Min., Palæo., Con., Archæo.* Coll. Desires rarities in "Mann's Catalogue," Trans. Miss. Plants, and Indian Relics in exchange for Plants. (Catalogue sent.)

1904. MILLER, F. A., San Francisco, Cal. *Bot.*

1905. MILLER, H. S., 104 State St., Albany, N. Y. *Micros.*

1906. MILLER, JOHN A., St. Louis, Mo. *Geol., Min., Metall.* Coll. Ex.

1907. MILLER, S. A., 8 W. 3rd St., Cincinnati, O. *Palæo., Geol.* Coll. Ex.

1908. MILLER, THOS. B., Box 3788, New York City. *Micros.*

1909. MILLS, B. M., Needham, Mass. *Orn., Oöl.*

1910. MILLS, FRANK D., Pittsfield, Mass. *Oöl.* Coll. Ex

1911. MILLS, HENRY, 162 Fargo Ave., Buffalo, N. Y. *Micros.*

1912. MILNER, J. W., Waukegan, Lake Co., Ill. *Ichth.*

1913. MILNER, Mrs. S. A., Waukegan, Ill. *Bot.*

1914. MINOT, CHAS. S., Roslindale P. O., Boston, Mass. *Emb., Physiol.*

1915. MINOT, H. D., Box 2477, Boston, Mass. *Orn.* Coll.

1916. MITCHEL, GEO., Hanover, N. H. *Micros.*

1917. MITCHILL, R. M., 996 Dean St., Brooklyn, N. Y. *Oöl., Min.* Coll. Ex.

1918. MOFFITT, JACOB W., Chillicothe, Ill. *Palæo.*
1919. MOHR, CHAS., Mobile, Ala. *Phæn.Bot., Ferns, Mosses.* Coll. Ex.
1920. MOHR, E K., Morris, Grundy Co., Ill. *Bot., Geol.* Coll. Ex.
1921. MOHR, PAUL, Clifton Ave., Cincinnati, O. *Geol., Palæo., Min.* Coll. Ex.
1922. MONELL, JOSEPH, Box 2873, St. Louis, Mo. *Bot.; Ent.; Aphidæ.* Coll. Ex.
1923. MONROE, K. DAYTON, D. D. S., 73 No. Pearl St., Albany, N. Y. *Micros.*
1924. MONTGOMERY, HENRY, A. M., Science Master, Collegiate Inst., Toronto, Can. *Palæo., Emb., Vertebrates, Mollusks, Radiates, Archæo.* Coll. Ex.
1925. MONTGOMERY, STEWART, Prof. Nat. Hist., Olivet Coll., Olivet, Mich.
1926. MOODY, H. L., Malden, Mass. *Ent.; Coleopterous larvæ.*
1927. MOODY, J. D., Mendota, Ill. *Am.Archæo.* Coll.
1928. MOORE, A. J., Box 68, Coldwater, Mich. *Micros.*
1929. MOORE, HENRY S., cor. 6th Ave. & 43rd St., New York City. *Micros.*
1930. MOORE, H. R., 528 California St., San Francisco, Cal. *Micros.*
1931. MOORE, JOSEPH, Prof. of Geol., Earlham Coll., Richmond, Ind. *Geol., Archæo.* Coll. Ex.
1932. MOORE, J. P., Cal. Acad. Sci., San Francisco, Cal. *Micros., Bot.*
1933. MOORES, HENRY, 109 W. Rich St., Columbus, O. *Palæo., Mollusks.* Coll. Ex.
1934. MORANDI, FRANCIS W., Malden, Mass. *Bot.: Cryptogams; Min.* Coll. Ex.
1935. MORDEN, JOHN A., Hyde Park, Ontario, Can. *Orn., Oöl.* Coll. Ex.
1936. MOREHEAD, Mrs. H. B., Park Ave., Cincinnati, O. *Land, Fresh Water and Marine Mollusks.* Coll. Ex.
1937. MOREHOUSE, GEORGE R., M. D., 227 So. 9th St., Phila., Pa. *Fungi, Gen. Biol., Herpetol., Histol. of Vert.* Coll.
1938. MOREHOUSE, GEORGE W., Wayland, Steuben Co., N .Y. *Micros., Histol.* Coll.
1939. MORGAN, A. P., Dayton, O. *Bot.* Coll. Ex.

1940. MORGAN, HENRY, 200 Carew St., Springfield, Mass. *Orn.*

1941. MORGAN, Mrs. L. V., Dayton, O. *Phæn.Bot., Crypt. Bot.* Coll.

1942. MORGAN, WM. J., Somerville, N. Y. *Micros.*

1943. MORLEY, Prof. EDW. W., M D., Ph.D., Hudson, O. *Bot.* Coll.

1944. MORONG, Rev. THOMAS, Ashland, Mass. *Phæn.Bot.* Coll. Ex.

1945. MORRIS, Miss CORNELIA F., 123 So. Salina St., Syracuse, N. Y. *Geol., Lithol., Min., Invert.Palæo., L.& F. W. Shells.* Coll. Ex.

1946. MORRIS, GALLOWAY C., E. Tulpohocken St., Germantown, Phila., Pa. *Micros.: Diatoms, Desmids, Algæ.* Ex.

1947. MORRIS, J. CHESTON, M. D., 1514 Spruce St., Phila., Pa. *Micros., Gen.Biol., Anthro., Ichth.*

1948. MORRIS, ROB'T T., New Haven, Conn. *Vertebrates of N. A.* Spec. — *Ichth., Orn., Herpetol.* Coll. Ex.

1949. MORRIS, W. J., Elmore, Peoria Co., Ill. *Geol., Archæo., Min., Mollusks, Con.* Coll. Ex.

1950. MORRISON, H. K., Box 22, Morganton, Burke Co., N. C. *Ent.: Coleoptera, Lepidoptera.* (List of species sent on application.)

1951. MORSE, A. P., Sherborn, Mass. *Gen.Nat.Hist., Min.* Coll. Ex.

1952. MORSE, C. A., Bangor, Me. *Orn., Oöl.* Coll. Ex.

1953. MORSE, EDWARD S., Salem, Mass. (At present in Tokio pai-Yaku, Japan.) *Zoöl.*

1954. MORSE, FRANK B., B. S., 13 Worcester Square, Boston, Mass. *Geol., Min.* Coll. Ex.

1955. MORTIMER, Capt. JOHN H., Ship "Hamilton Fish" (Care of Chas. H. Marshall & Co., N. Y. City). *Hydrozoa, Mollusks.* Coll.

1956. MORTON, Miss E. L., Newburg, N. Y. *Ent.* Coll. Ex.

1957. MORTON, HENRY H., Morristown, N. J. *Ent., Orn.* Coll. Ex.

1958. MOSES, T. F., M. D., Prof. Nat. Sci., Univ., Urbana, O. *Geol., Gen.Biol., Archæo.* Coll.

1959. MOSHER, Dr. J. S., 3 Lancaster St., Albany, N. Y. *Micros.*

1960. MOSIER, C. A., Des Moines, Iowa. *Orn.* Coll.

1961. MOSS, J. CLARK, P. C., Robin's Nest P. O., Peoria Co., Ill. *Geol.*, *Orn.*, *Oöl.* Coll. Ex.
1962. MOTHERAL, Rev. N. W., Mt. Hope, Lawrence Co., Ala. *Ent.*
1963. MOTT, HENRY A., jr., Ph. D., E. M., Box 2036, New York City. *Micros.* Coll.
1964. MOULTON, EDWARD, Newburyport, Mass, *Micros.*
1965. MOUSER, S. M., M. D., 235 Kearney St., San Francisco, Cal *Micros*, *Gen.Biol.*, *Vert.Emb.*, *Histol. of Vert.* Coll. Ex.
1966. MOYER, J. S., M. D., Richland Centre, Bucks Co., Pa. *Bot.* Coll. Will exchange for Southern Plants or those west of the Mississippi.
1967. MUDGE, BENJ. F., A. M., Manhattan, Riley Co., Kans. *Geol.*
1968. MUELLER, Prof. RUDOLPH, Ph.D., New Corydon, Jay Co., Ind. *Geol.*, *Ethnol.* Coll.
1969. MUHLEMAN, J. R., Woodburn, Macoupin Co., Ill. *Lepidoptera.* Coll.
1970. MUIR, WM., Fox Creek, St. Louis Co., Mo. *Horticulture.* Coll.
1971. MUNDT, A. H., Fairbury, Ill. *Ent.: Lepidoptera, Coleoptera; Orn.* Coll. Ex.
1972. MUNDY. Rev. EZEKIEL W., Syracuse, N. Y.
1973. MUNGER, L. D., Leicester Junction, Vt. *Oöl.* Coll. Ex.
1974. MUNN, J. L., Box 45, East Orange, N. J. *Horticulture.*
1975. MUNROE, Prof CHAS. E., U. S. N. Acad., Annapolis. Md. *Palæo.*, *Min.*, *Micros.* Coll. Ex.
1976. MUNROE, HENRY F., 821 West Jackson St., Chicago, Ill. *Ferns*, *Desmids*, *Diatoms*, *Micros.* Coll. Ex.
1977. MUNROE, H. S., E. M., Ph.D., Columbia Coll., N. Y. City. *Economic Geol.*, *Mining Engineering.* Coll.
1978. MUNROE, W. C., M. D., Penn Yan, Yates Co., N. Y. *Bot.: Diatoms*, *Horticulture; Micros.*, *Photog.*, *Infusoria.* Coll. Ex.
1979. MURDOCH, A. J., M. D., Taylor's Falls, Chisago Co., Minn.
1980. MURDOCH, JOHN, 195 Walnut Ave., Roxbury, Mass. *Gen.Biol.*, *Orn.*, *Ichth.* Coll.
1981. MURDOCH, Hon. S., Elkader. Iowa. *Archæo.*
1982. MURRAY, F. MARION, M. D., Key West, Fla. *Phæn. Bot.*
1983. MURRAY, WM., 115 Jackson St. West, Hamilton, Ontario, Can. *Ent.: Coleoptera. Lepidoptera.* Coll. Ex.

1984. MURTFELDT, MARY E., Kirkwood, Mo. *Bot., Ent.* Coll. Ex.
1985. NAGEL, J. J., Davenport, Iowa. *Bot.*
1986. NASH, Prof. F. P., Geneva, N. Y. *Micros.*
1987. NASH, H. W., Ithaca, N. Y. *Lepidoptera, Orn.* Coll. Ex.
1988. NASH, Rev. J. A., Des Moines, Iowa.
1989. NASH, Miss OLIVE A, Oneida, N. Y. *Bot.*
1990. NASON, Rev. ELIAS, North Billerica, Mass. *Bot.*
1991. NASON, Prof. HENRY B., Troy, N. Y. *Min.* Coll. Ex.
1992. NASON, WM. A., M. D., Algonquin, Ill. *Ent.: Coleoptera; Invert. Palæo., Mollusks.* Coll. Ex.
1993. NEFF, WM. W., Windham, O. *Min.* Coll. Ex.
1994. NEIL, JAMES, 100 Public Square, Cleveland, O. *Micros.*
1995. NEISLER, H. M, M. D., Butler, Taylor Co., Ga. *Bot.*
1996. NELSON, Prof. E. T., Wesleyan Univ., Delaware, O. *Geol., Zoöl.* Coll. Ex.
1997. NELSON, E. W., Chicago, Ill. (Address for next three years, St. Michaels, Alaska, care of Alaska Commercial Co., San Francisco, Cal.) *Orn., Herpetol., Ichth.*
1998. NELSON, HENRY M., Georgetown, Mass. *Phæn. Bot.*
1999. NELSON, S. AUGUSTUS, Georgetown, Mass. *Geol.*
2000. NETTELROTH, HENRY, C. E., Louisville, Ky. *Palæo., Orn.* Coll. L. Silurian, U. Silurian and Devonian fossils in exchange for specimens from other localities.
2001. NEUMOGEN, B., Box 2581, New York City. *Lepidoptera of the World.* Coll. Ex.
2002. NEVIUS, Rev. R. D., D.D., Baker City, Oregon. *Bot.*
2003. NEWBERRY, J. S., M. D., LL.D., State Geologist of Ohio, Prof. of Geol. and Palæo., Columbia Coll., New York City. *Geol., Palæo.*
2004. NEWBY, JAMES B., 1127 Washington Ave., St. Louis, Mo. *Archæo., Orn., Oöl.* Coll. Ex.
2005. NEWCOMB, HARRY H., Greenwood, Mass. *Coleoptera, Lepidoptera.* Coll. Ex.
2006. NEWCOMB, W., M. D., Ithaca, N. Y. Charge of Cornell Univ. Collection. *Con.* Ex.
2007. NEWTON, Rev. JOHN, Mary Esther, Santa Rosa Co., Fla.

2008. NICHOLS, ALONZO, Chariton, Iowa. *Phæn.Bot.*, *Ent.* Ex. live plants.

2009. NICHOLS, C. E., M. D., 14 Fourth St., Troy, N. Y. *Micros.*

2010. NICHOLS, GEO. W., Merrimac, Essex Co., Mass. *Ent.*, *Mollusks.* Coll.

2011. NICHOLS, WALTER R., New Haven, Conn. *Orn. Oöl.* Coll. Ex.

2012. NICHOLS, WM. G., Merrimac, Essex Co., Mass. *Ent.: Coleoptera, Lepidoptera, Mollusks.* Ex.

2013. NICHOLSON, HUNTER, Prof. E. Tenn. Univ., Agric. Coll., Knoxville, Tenn. *Nat. Hist. applied to Agriculture.*

2014. NICKERSON, GEORGE Y., New Bedford, Mass. *Gen. Nat. Hist.*

2015. NICODEMUS, WM. J. L., Prof. Univ. of Wis., Madison, Wis. *Civil and Mechanical Engineering.*

2016. NICOLAUS, E. B., 40 Public Square, Cleveland, O. *Micros.*

2017. NILES, W. H., Prof. Mass. Inst. Technol., Cambridge, Mass. *Phys. Geog.*, *Geol.*

2018. NIMS, ALLEN, Watertown, N. Y. *Bot.*, *Geol.*, *Min.*, *Micros.*, *Gen.Biol.*, *Ethnol.*, *Philol.*, *Ent.* Coll. Ex.

2019. NOBLE, FRANK T., Fitchburg, Mass. *Ent.* Coll.

2020. NOE, LEWIS H., Elizabeth, N. J. *Micros.*

2021. NOLAN, EDWARD J., Rec. Sec. and Librarian, Acad. Nat. Sci., Phila., Pa *Bibliog. of Sci.*, *Gen.Biol.*

2022. NOLT, R. S., Strasburg, Lancaster Co., Pa. *Min.* Coll. Ex.

2023. NORRIS, Dr. BASIL, Washington, D. C. *Micros.*

2024. NORRIS, WM., San Francisco, Cal. *Micros.*

2025. NORTH, MORTIMER C., New Britain, Conn. *Min.*, Coll. Ex.

2026. NORTON, EDW., Farmington, Conn. *Ent.: Hymenoptera.* Coll.

2027. NORTON, I. HERBERT, Leicester, Vt. *Geol.*, *Min.*, *Palæo.*, *Bot.* Coll. Ex.

2028. NORTON, MARY E. B., Box V, San José, Cal. *Phæn. Bot.* Coll. Ex.

2029. NORTON, WM. H., Prof. Cornell Coll., Mt. Vernon, Iowa. *Palæo.* Coll. Silurian and Devonian Fossils for exchange.

2030. NORWOOD, Prof. CHAS. J., Bethel Coll., Russellville, Ky. *Geol., Invert. Palæo.* Coll.

2031. NORWOOD, J. G., M. D., LL.D., Columbia, Mo. *Invert. Palæo., Geol.* Coll.

2032. NOTTBECK, PETER DE, Fishkill-on-the-Hudson, N. Y. *Orn.* Coll. Ex.

2033. NOYES, C. H., Warren, Pa. *Bot., Gen. Biol.*

2034. NOYES, Dr. ROBERT F., Providence, R. I. *Micros.*

2035. NOYES, W. H., D.M.D., 12 Essex St., Newburyport, Mass. *Micros.*, Coll. *Fishes and Aquatic Plants.* Ex.

2036. NUTT, C. N., New Albany, Ind. *Ent.*

2037. NUTTALL, L. W., Nuttallburg, Fayette Co., W. Va. *Geol., Ent.*

2038. NUTTER, FRANK H., C. E., Sup't Minnetonka Lake Park, Excelsior, Hennepin Co., Minn. *Min., Oöl.* Coll. Will obtain local specimens of any kind in return for properly prepared and identified birds' eggs.

2039. NUTTING, WALLACE, Wheaton, Du Page Co., Ill. *Bot., Photog., Mam., Orn., Tax.* Coll. Ex.

2040. OAKES, R. A., Watertown, N. Y. *Palæo.: Trenton Limestones and Utica Slate.*

2041. OAKES, WALTER, cor. 9th & Penn Sts., Kansas City, Mo. *Oöl.; Con.* Coll. Ex.

2042. OBER, FREDERICK A. (Two years in the West Indies, and one year in Florida previously). *Orn.*

2043. OBERLY, THOS. J., Sinking Spring, Berks Co., Pa. *Phæn. Bot., Ferns, Mosses.* Coll. Ex.

2044. OGDEN, JOHN J., 22 Tremont St., Boston, Mass. *Micros.*

2045. OHLEN, Miss H. E., Springfield, Mo.

2046. OLDROYD, O. H., Dayton, O. *Micros.*

2047. OLESON, O. M., Ph.G., Fort Dodge, Iowa. *Bot.* Coll. Ex.

2048. OLIVER, Dr. O. C., Chicago, Ill. *Micros.*

2049. OLMSTEAD, Rev. L. G., LL.D., Fort Edward, N. Y. *Bot., Palæo., Geol., Min., Anthro.* Coll. Ex.

2050. O'NEALL, J. KELLY, Lebanon, O. *Geol., Palæo.* Coll. Ex.

2051. ORCUTT, JOHN H., San Diego, Cal. *Min., Oöl., Con.* Coll. Ex.

2052. OREMIEULX, Prof. T. D', 7 Winthrop Place, New York City. *Micros.*

2053. ORNE, JOHN, jr., 104 Ellery St., Cambridge, Mass. *Bot.; Ent.: Coleoptera.*

2054. ORTON, Prof. EDWARD, Columbus, O. *Strat. Geol.* Coll.

2055. OSBORN, A. O., Waterville, Oneida Co., N. Y. *Geol., Palæo.: Silurian and Devonian Fossils.* Coll. Ex.

2056. OSBORN, B. F., Rippey, Greene Co., Iowa. *Palæo.. Geol., Min.* Coll. Ex.

2057. OSBORN, FRANCIS A., 43 Milk St., Boston, Mass. *Phæn. Bot., Crypt. Bot., Micros.*

2058. OSBORN, HARRY L., A.B., Mus. Wesleyan Univ., Middletown, Conn. *Mollusks, Marine Invert., Min., Bot., Micros* Coll. Ex.

2059. OSBORN, H. S., LL.D., Prof. Nat. Sci., State Univ., Oxford, O. *Min., Metall.* Coll. Ex.

2060. OSBORN, J. A., Scientist, Mahmal, Cambridgeport, Mass. Scientific communications earnestly solicited.

2061. OSBORNE, SAMUEL D., 428 Henry St., Brooklyn, N. Y. *Orn., Oöl.* Coll.

2062. OSBORNE, THOMAS B., Box 1152, New Haven, Conn. *Orn., Herpetol.* Coll. Ex.

2063. OSGOOD, F. STOREY, Newburyport, Mass. *Min.* Coll. Ex.

2064. OSLER, WM., M. D., Prof. of Physiol., McGill Univ., 1351 St. Catherine St., Montreal, Can. *Gen. Biol., Entozoa, Protozoa.*

2065. OTIS, GEORGE A., Curator U. S. A., Med. Mus., Washington, D. C. *Micros., Micro-Photo., Ethnol., Vert., Osteol.* Coll. Ex.

2066. OWEN, EDWARD T., Prof. of French and Lit., Univ. of Wis., Madison, Wis. *Lepidoptera of the World.* Coll. Ex.

2067. OWEN, RICHARD (late Prof. Nat. Sci., Ind. State Univ.), New Harmony, Ind. *Phys. Geol.* Coll. Ex.

2068. OWENS, A. J., San Diego, Cal. *Mollusks.*

2069. OWENS, CHAS. S., 76 Howard Ave., Utica, N. Y.

2070. PACKARD, A. S., jr., Prof. of Zoöl. and Geol., Brown Univ., Providence, R. I. *Gen. Zoöl., Articulates, Crustacea, Worms.* Desires Phyllopod Crustacea and Intestinal Worms.

2071. PAGE, Miss A. L., Danvers, Mass. *Bot.*

2072. PAGE, ADINO, Metamora, Ill. *Horticulture, Invert. Palæo., Geol, Min., Invert. Emb., Crustacea, Mollusks.* Coll. Ex.

2073. PAGE, JOHN W., Metamora, Woodford Co., Ill. *Horticulture, Geol., Vertebrates.* Coll. Ex.

2074. PAGE BROS. (J. W. & C. N.), Muscatine, Iowa. *Geol., Orn., Oöl., Archæo., Lepidoptera.* Coll. Ex.
2075. PAINE, CHAS. S., East Bethel, Vt.
2076. PAINE, Prof. J. A., Ph.D., Tarrytown, Westchester Co., N. Y. *Phæn.Bot., Ferns.* Coll. Ex.
2077. PALM, SWANTE (Swedish Consul), Austin, Texas. *Palæo., Geol., Archæo.*
2078. PALMER, ASHER, Kennett's Square, Chester Co., Pa. *Tax.* Coll. Ex.
2079. PALMER, ELMORE, M. D., Dexter, Mich. *Bot.* Coll. Ex.
2080. PALMER, E. R., Louisville, Ky. *Micros.*
2081. PALMER, FRED. W., Victor, Ontario Co., N. Y. *Bot., Ent.* Coll.
2082. PALMER, Miss KATE, 275 W. Jefferson St., Louisville, Ky. *Bot.* Coll.
2083. PANTON, M. H., Junction City, Davis Co., Kans. *Phæn.Bot.*
2084. PARK, AUSTIN F., 31 Museum Building, Troy, N. Y. *Orn.* Coll. Ex.
2085. PARK, DORA L., Dodge's Corners, Waukesha Co., Wis. *Bot., Geol., Ent., Tax.* Coll. Ex.
2086. PARKER, A. T., Lexington, Ky. *Micros., Histol., Photo-Micrography.* Coll. Ex.
2087. PARKER, CHAS. F., 524 N. 2nd St., Camden, N. J. *Bot. of New Jersey.*
2088. PARKER, Dr. E. H., Poughkeepsie, N. Y. *Micros.*
2089. PARKER, GEORGE W., Wenona, Marshall Co., Ill., or Yorkville, Kendall Co., Ill. *Gen. Nat. Hist., Zoöl.* Coll. Ex.
2090. PARKER, HERBERT, So. Lancaster, Mass. *Orn., Oöl.* Coll.
2091. PARKER, Prof. H. W., Iowa Coll., Grinnell, Iowa. *Invert. Palæo., Strat. Geol., Orn., Lepidoptera, Mollusks.* Coll.
2092. PARKERSON, HARRY P., 2 Prescott Place, Dorchester, Mass. *Mollusks.* Coll. Ex.
2093. PARKHURST, V. P., East Templeton, Mass. *Gen. Nat. Hist., Invert. Palæo., Min., Mollusks.* Spec.—*Bot., W. I. Ferns.* Coll. Ex.
2094. PARKMAN, EUGENE S., Taxidermist, Aledo, Mercer Co., Ill. *Orn., Oöl., Ent.* Coll. Ex.
2095. PARMELE, GEO. L., M. D., D. M. D., Hartford, Conn. *Micros., Geol., Min., Ent., Gen. Biol.* Coll. Ex.

2096. PARMELE, Mrs. G. L., Hartford, Conn. *Ferns, Ent.* Coll. Ex.
2097. PARRISH, HUGH R., Burlington, N. J. *Oöl.* Coll. Ex.
2098. PARRY, Dr. C. C., Davenport, Iowa. *Bot.*
2099. PARSHALL, S. E (Collector of Am. Birds, Nests, and Eggs), Cheshire, Ontario Co., N. Y. *Orn.* Coll.
2100. PARSONS, CHAS. W., M. D., Prof. of Physiol., Brown Univ., Providence, R. I. *Anat., Physiol.*
2101. PATCH, HARRY H., Salem, Mass. *Orn., Oöl.* Coll. Ex.
2102. PATRICK, Prof. GEO. E., State Univ., Lawrence, Kans. *Min.*
2103. PATTEE, W. D., Burnett Station, Wis. *Orn., Coleoptera.* Coll.
2104. PATTEE, W. H., M. D., Loudon Ridge, N. H. *Orn.* Coll. Ex.
2105. PATTERSON, HARRY N., Oquawka, Henderson Co., Ill. *Bot.* Coll. Ex.
2106. PATTERSON, N L., Georgetown, Colo. *Micros.*
2107. PATTERSON, JOHN P., A. M., Sup't Schools, Washington C. H., Fayette Co., O. *Con.* Coll. Ex.
2108. PATTON, ROB'T M., 312 No. 33rd St., Phila., Pa. *Ent., Gen. Nat. Hist.* Coll.
2109. PATTON, W. H., Waterbury, Conn. *Bot.: Ent.: Hymenoptera.* Coll.
2110. PAUL, C. A., Skowhegan, Me. *Orn., Geol.* Coll. Ex.
2111. PAUL, WILLARD A., M. D., South Solon, Somerset Co., Me. *Geol., Min., Bot.* Coll. Ex.
2112. PEABODY, SELIM H., Ph.D., Prof. Ill. Univ., Champaign, Ill. *Ent.* Coll. Ex
2113. PEALE, A. C., M. D., U. S. Geolog. Surv., 509 7th St. N. W., Washington, D. C. *Geol.*
2114. PEARSALL, JOHN, 1420 So. 2nd St., Phila., Pa. *Geol., Orn., Oöl.; Ent.: Lepidoptera; Mollusks.* Coll. Ex.
2115. PEARSALL, RICHARD F., New York City Ins. Co., 100 Broadway, New York City. *Orn., Oöl.* Coll. Ex.
2116. PEARSON, A. W., Norwich, Conn. *Ent.*
2117. PEARSON, JONATHAN, Union Coll, Schenectady, N. Y.
2118. PEASE, F. N., Sheffield Sci. Sch., New Haven, Conn. *Micros.* Ex.

2119. PECK, CHAS. H., State Botanist, Albany, N. Y. *Bot.: Fungi.* Coll.

2120. PECK, GEO. W., Roselle, N. J. *Lepidoptera.* Coll. Ex.

2121. PECK, WM. A., C. E., Idaho Springs, Colo. *Min.; Bot.: Ferns.* Coll. Ex.

2122. PECKHAM, GEO. W., Teacher of Biol., High School, Milwaukee, Wis. *Comp. Anat.* Coll.

2123. PECKHAM, Prof. S. F., Minneapolis, Minn. *Min.* Zoölites and other minerals for exchange.

2124. PECKHAM, W. C., Adelphi Acad., 348 Grand Ave., Brooklyn, N. Y. *Bot., Zoöl.*

2125. PEDRICK, WM. R., Lawrence, Mass. *Geol., Min., Micros., Archæo.* Coll.

2126. PEELOR, DAVID, C. E., Johnstown, Pa. *Geol., Micros.*

2127. PEET, L. R., Baltimore, Md. *Micros.*

2128. PEET, Rev. STEPHEN D., Unionville, Lake Co., O. (Editor of "Am. Antiquarian," Cleveland, O.) *Anthro., Archæo., Ethnol.* Coll. Ex.

2129. PEIRCE, J., Box NN, Providence, R. I. *Micros.* Coll. Ex.

2130. PEIRCE, WM. C., S.T.D., Prof. Emeritus of Nat. Sci., Baldwin Univ., Berea, O. *Bot., Geol.* Coll.

2131. PELTON, Miss EMILY O., Brownsville, Cal. *Phæn. Bot.: Ferns.* Coll. Ex.

2132. PEMBER, F. T., 164 & 166 South Fifth Ave., New York City. *Oöl.* Coll. Ex.

2133. PENNOCK, CHARLES J., Princeton, N. J. *Orn.* Coll.

2134. PENNOCK, EDWARD, 805 Franklin St., Phila., Pa. *Bot., Micros.*

2135. PENNYPACKER, CHAS. H., West Chester, Pa. *Min., Con., Archæo., Bot., Micros.* Coll. Ex.

2136. PENNYPACKER, J. T., L. B. 13, Phila., Pa. *Bot., Ent.*

2137. PEPOON, HERMAN S., Warren, Jo Daviess Co., Ill. *Nat. Hist.* Spec.—*Bot.* Coll. Ex.

2138. PEPPER, WALTER J., Keithsburg, Ill. *Geol., Archæo.*

2139. PERGANDE, THEO., Dep't of Agric., Washington, D. C. *Coleoptera.*

2140. PERKINS, GEO. D., Taxidermist, Clyde, Wayne Co., N. Y. Coll. Ex.

2141. PERKINS, GEO. H., Prof. Nat. Hist., Univ. of Vt., Burlington, Vt. *Bot., Geol., Archæo., Zoöl.* Coll. Ex.

2142. PERKINS, L. R., Salem, Mass. *Micros.*
2143. PERKINS, MORT, Woodcock, Crawford Co., Pa. *Coleoptera, Lepidoptera.* Coll. Ex.
2144. PEROT, CHAS. P., 142 No. 18th St., Phila., Pa. *Micros., Photog.*
2145. PERRINE, T. M., Anna, Union Co., Ill. *Archæo.* Coll. Ex.
2146. PERRY, Rev. E. A., Quincy, Mass. *Min., Micros.* Coll. Ex.
2147. PERRY, RALPH, 50 East Washington St., Indianapolis, Ind. *Ent.: Lepidoptera.* Coll. Ex.
2148. PERRY, S. E., D. D. S., 111 Madison Ave., New York City. *Micros.*
2149. PETER, A. M., Lexington, Ky. *Phæn.Bot.* Coll. Ex.
2150. PETER, ROBERT, Lexington, Ky. *Geol., Min.* Coll.
2151. PETERS, Hon. THOMAS M., Moulton, Ala. *Bot.: Southern Ferns.*
2152. PETICOLAS, C. L., 635 8th St. N., Richmond, Va. *Micros.* Spec.—*Diatoms.* (Circulars for stamps.)
2153. PETTEE, WM. H., Prof. of Geol., Univ. of Mich., Ann Arbor, Mich. *Mining and Geol.*
2154. PETTET, J., A M., M. D., 97 Muirson St., Cleveland, O. *Micros.*
2155. PETTIGER, Rev. WM., New Egypt, Ocean Co., N. J. *Micros.*
2156. PETTIGREW, GEO. A., Ludlow, Vt. *Orn., Ent.* Coll. Ex.
2157. PETTINGELL, A., Hudson, O. *Coleoptera.* Coll. Ex.
2158. PETTINGER, Rev. WM., Burlington, N. J. *Micros.*
2159. PFORDTE, OTTO, Hoboken, N. J. *Ent.: Coleoptera.* Coll.
2160. PHELPS, ALBERT H. (Curiosity Collector), West Pawlet, Rutherford Co., Vt. *Zoöl., Min., Geol., Palæo., Bot.* Coll. Ex.
2161. PHELPS, EDWARD E., M. D., Windsor, Vt. *Gen. Nat.Hist.* Spec. — *Micros., Histol., Bot.* Coll. Ex.
2162. PHELPS, Prof. E., Hanover, N. H. *Micros.*
2163. PHELPS, Mrs. LINCOLN, 363 Eutaw Place, Baltimore, Md. *Bot.*
2164. PHILIPS, Prof. G. MORRIS, A. M., Lewisburg, Union Co., Pa. *Min.* Coll. Ex.
2165. PHILLIPS, BARNET, Sec'y Am. Fishcultural Assoc., 41 Troy Ave., Brooklyn, N. Y.

2166. PHILLIPS, JOHN C., Berkeley St., Boston, Mass. *Bot.* Coll.
2167. PHIN, JOHN, Box 2852, New York City. *Micros.*
2168. PHIPPEN, GEO. D., Salem, Mass. *Bot.*
2169. PHŒNIX, S. WHITNEY, A. M., LL B., 22 W. 23rd St., New York City. *Phæn. Bot., Geol., Photog., Archæo.* Coll.
2170. PICKERING, W. H., 84 Mt. Vernon St., Boston, Mass. *Photog.*
2171. PICKETT, THOMAS E., M. D., Maysville, Ky. *Anthropol.*
2172. PIERCE, GEO. W., Leominster, Mass.
2173. PIERCE, NEWTON B., Ludington, Mason Co., Mich. *Zoöl., Orthoptera.* Coll. Ex.
2174. PIERSOL, GEO. A., M. D., 1110 Spring Garden St., Phila., Pa. *Micros.* Coll. Ex.
2175. PIERSON, AUSTIN, Newton, Sussex Co., N. J. *Nat. Hist., Oöl., Ent., Orn.* Coll. Ex.
2176. PIERSON, A. R., Gainesville, Alachua Co., Fla. *Orn., Oöl.* Coll. Ex.
2177. PIFFORD, Dr. H. G., 123 E. 35th St., New York City. *Micros.*
2178. PIGUE, E. H., 4 City Hotel Block, Nashville, Tenn. *Con., Geol.*
2179. PIKE, J. W., Vineland, N. J. *Min., Geol., Palæo., Metall.* Coll.
2180. PIKE, NICOLAS, 575 Carlton Ave., Brooklyn, N. Y. *Algæ, Micros., Photog., Arachnida.* Coll. Ex.
2181. PILATE, E., M. D., Dayton, O. *Ent.: Lepidoptera.* Coll. Ex.
2182. PILATE, GEO. R., Dayton, O. *Ent.: Lepidoptera.* Coll. Ex.
2183. PILLSBURY, J. H., Instructor in Nat. Sci., High School, Springfield, Mass. *Bot., Zoöl., Micros.*
2184. PILLSBURY, Mrs. J. H., Springfield, Mass. *Bot.* Coll.
2185. PILLSBURY, NELLIE S., Springfield, Mass. *Bot.* Coll.
2186. PIPER, Mrs. S. M., Brockton, Mass. *Geol., Ent.* Spec. — *Bot.*
2187. PIPER, R. U., M. D., Chicago, Ill. *Micros.*
2188. PIRKEY, OVAL, Prof. Science, Christian Univ., Canton, Lewis Co., Mo. Coll.
2189. PITKIN, C. F., 721 Penn St., Kansas City, Mo. *Geol.* Coll. Ex.

2190. PITMAN, Prof. STEPHEN M., A. M. B., Tufts Coll., College Hill, Mass. *Photog.*

2191. PLATT, FRANKLIN, 615 Walnut St., Phila., Pa. *Geol.*

2192. PLEAS, ELWOOD, Monroe, Ind. *Min., Geol., Palæo.* Coll. Ex.

2193. PLIMPTON, FRED S., Box 1036, Boston, Mass. *Filices.* Ex.

2194. PLUMMER, Miss SARA A., Santa Barbara, Cal. *Phæn. Bot.; Crypt.Bot.: Ferns, Mosses, Algæ; Micros., Lepidoptera, Mollusks.* Coll.

2195. POLLOCK, Prof. J. E., Marlboro, Stark Co, O.

2196. POMEROY, Dr. C. G., Newark, N. J. *Micros.*

2197. POND, F. E. ("Will Wildwood"), Westfield, Marquette Co., Wis. *Orn., Micros.*

2198. POOLE, HERMAN, Buffalo, N. Y. *Micros., Arachnol.* Coll. Ex.

2199. POOLEY, J. H., M. D., Prof. of Surgery, Starling Med. Coll., 117 East Broad St., Columbus, O. *Bot., Ent.*

2200. POORE, D. J., Merrimac, Mass. *Archæo.* Coll. Ex.

2201. POPE, CHAS. H., Ph.B., 331 8th St., Louisville, Ky. *Bot.* Coll.

2202. POPENOE, EDWIN A., Sec'y Kansas Acad. of Sci., No. Topeka, Kans. *Phæn.Bot.: Compositæ, Gramineæ; Geog. Distrib.; Ent.: Coleoptera.*

2203. POPENOE, Mrs. FLORENCE E., No. Topeka, Kans. *Bot.* Ex.

2204. POPENOE, F. O., Box 331, Topeka, Kans. *Bot.* Coll. Ex.

2205. PORTER, C. J. A., A. B., Wooster, Wayne Co., O. *Nat. Hist., Geol., Archæo., Biol.* Coll. Ex.

2206. PORTER, Dr. H. T., Georgetown, D. C. *Micros.*

2207. PORTER, THOMAS C., Prof. of Bot. and Zool., Lafayette Coll., Easton, Pa. *Bot.* Coll. Ex. Introduced Plants desired.

2208. POSTELL, JAMES, St. Simon's Mills, Glynn Co., Ga. *Lepidoptera, Mollusks.* Coll. Ex.

2209. POTTER, B. S., Prof. No. Missouri State Normal School, Kirksville, Mo. *Bot., Micros.*

2210. POTTER, W. B., A. M., E. M., Prof. of Mining and Metallurgy, Washington Univ., St. Louis, Mo. *Geol., Lithol., Metall., Archæo.* Coll. Ex.

2211. POTTER, Dr. W. G., 150 Allen St., Buffalo, N. Y. *Micros.*

2212. POURTALES, L. F., Mus. Comp. Zoöl., Cambridge, Mass. *Zoöl.: Radiates.*
2213. POWELL, Hon. SAMUEL, Newport, R. I. *Micros.*
2214. POWELL, J. W., Ph.D., Box 806, Washington, D. C. *Geol., Ethnol., Philol.*
2215. PRATT, HENRY M., Concord, Mass.
2216. PRATT, STILLMAN B., Marlboro, Mass. *Anthropol.*
2217. PRATT, W. H., Davenport, Iowa. *Con., Archæo., Geol.*
2218. PRENTISS, Prof. ALBERT N., Cornell Univ., Ithaca, N. Y. *Bot.*
2219. PRESCOTT, C. D., New Bedford, Mass. *Micros.*
2220. PRESCOTT, HOWARD W., Box 754, Providence, R. I. *Bot., Ent.* Coll. Ex.
2221. PRESTON, WALTER F., Box 481, Dixon, Ill. *Ent.* Coll. Ex.
2222. PRICE, Miss KATE, Carpentersville, Kane Co., Ill. *Zoöl.*
2223. PRIDE, A., Toronto, Can. *Zoöl.*
2224. PRIME, FREDERICK, jr., Ass't State Geologist, 907 Walnut St., Phila., Pa. *Min., Geol.*
2225. PRIME, TEMPLE, Wall St., New York City. *Con.*
2226. PRINDLE, S. B., Fort Dodge, Iowa. *Geol., Lithol.*
2227. PRINGLE, C. G., A.M., Charlotte, Vt. *Bot.* Coll. Ex.
2228. PROCTER, JOHN R. (Care of Ky. Geolog. Surv.), Frankfort, Ky. *Strat and Phys. Geol.* Ex.
2229. PROUTY, IRA J., Keene, N. H. *Gen. Biol., Orn.* Coll. Ex.
2230. PROVANCHER, L'ABBE L., Caprouge, Quebec, Can. *Ent., Bot., Con., Min.* Coll. Ex.
2231. PRUYN, FRANCIS I. N., Cambridge, Washington Co., N. Y. *Phæn. Bot., Land and Fresh Water Shells.* Coll. Ex.
2232. PUISSANT, P. A., Prof. St. Joseph's Sem., Troy, N. Y. *Bot.* Coll.
2233. PULSIFER, W. H., 1837 Kennett Place, St. Louis, Mo.
2234. PUMPELLY, Prof. RAPHAEL, Owego, Tioga Co., N. Y. *Geol.; Min.: Lithol.; Arhæo., Mineralogical Micros.* Coll.
2235. PURDIE, H. A., State House, Boston, Mass. *Orn., Oöl. of N. A.* Coll. Ex.
2236. PURRINGTON, CHAS., Pequabuck, Litchfield Co., Conn. *Min., Archæo.* Coll. Ex.

2237. PURVIANCE, A. T., Hennepin, Putnam Co., Ill. *Bot.: Trees, Shrubs, etc.* Coll. Ex.

2238. PUTNAM, F. W., Curator Peab. Mus. of Archæo. and Ethnol.; Ass't in charge of the Agassiz Collection of Fishes, Mus. of Comp. Zoöl.; Permament Sec. A. A. A. S.; Cambridge, Mass. *Anthropol.; Ichth.*

2239. PUTNAM, GRANVILLE B., 178 Brookline St., Boston, Mass. *Ferns, Algæ, Orn.* Coll. Ex.

2240. PUTNAM, J. DUNCAN, Davenport, Iowa. *Gen. Ent.* Spec.—*Arachnida, Solpugidæ, Coccidæ, Embryology.* Coll.

2241. PYNCHON, THOMAS R., D.D., LL.D., Trinity Coll., Hartford, Conn. *Mam.*

2242. QUICK, EDGAR R., Brookville, Franklin Co., Ind. *Mam., Orn.* Coll. Ex.

2243. QUIMBY, B. F., Phila., Pa. *Micros.*

2244. QUIMBY, Prof. ELIHU T., U. S. Geodetic Surv., Hanover, N. H.

2245. RAFTER, GEO. W., C.E., Rochester, N. Y. *Geol., Min., Metallurgy.*

2246. RAGSDALE, GEO. H., Gainesville, Cook Co., Tex. *Orn., Oöl.*

2247. RALPH, W. L., M. D., Utica, N. Y. *Orn. Oöl.* Coll.

2248. RALPHY, ALFRED J., M. D., Nashville, Brown Co., Ind. *Ent.* Coll. Ex.

2249. RALSTON, Miss ANNA L., Norristown, Pa. *Bot.* Coll.

2250. RALSTON, Rev. J. GRIER, D.D., Norristown, Pa. *Min., Geol., Palæo.* Coll. Ex.

2251. RAND, A. J., Springfield, Mass.

2252. RAND, B. H., M. D., Phila., Pa. *Micros.*

2253. RAND, S. F., Bellows Falls, Vt. *Orn.*

2254. RAND, THEO. D., 17 So. 3rd St., Phila., Pa. *Min.* Coll. Ex.

2255. RANDALL, F. A., Union City, Pa. *Palæo., Geol., Min., Archæo., Ichth., Reptiles, Mollusks. Radiates.* Coll. Ex.

2256. RANDALL, J. S., Georgetown, Colo. *Min.* Coll. Ex.

2257. RANDALL, ORAN E., West Chesterfield, N. H. *Bot., Vert. Palæo., Gen. Biol., Osteol., Vert.*

2258. RANDOLPH, JOHN C. F., A.M., E.M., 35 Broadway, N. Y. City. *Geol.; Min.: Lithol.* Ex.

2259. RASSWEILER, HENRY H., Prof. of Nat. Sci., North Western Coll., Naperville, Du Page Co., Ill. *Ent., Min.* Coll. Ex.

2260. RATHBUN, FRANK R., Auburn, N. Y. *Orn., Geol.* Coll.

2261. RATHBUN, RICHARD, Peabody Mus., New Haven, Conn. *Palæo., Marine Invert.*

2262. RATHBUN, SAMUEL F., Box 621, Auburn, Cayuga Co., N. Y. *Orn., Oöl.* Coll. Ex.

2263. RATHVON, S. S., 101 No. Queen St., Lancaster, Pa. *Gen. Nat. Hist.* Spec.— *Ent.*

2264. RAU, CHARLES, Smithsonian Inst., Washington, D. C. *Anthropol.: Archæo.; Ethnol.* Coll.

2265. RAU, EUGENE A., Bethlehem, Pa. *Phæn. Bot., Mosses.* Coll.

2266. RAUSEN, F. S., Taxidermist, Colorado Springs, Colo. *Orn., Geol., Archæo.* Coll. Ex.

2267. RAUTERBERG, F., 264 7th St., Milwaukee, Wis. *Coleoptera of U. S.* Ex.

2268. RAVENEL, H. W., Aiken, S. C. *Phæn. Bot., Crypt. Bot.: Mycology; Horticulture.* Coll.

2269. RAYMOND, R. W., Brooklyn, N. Y. *Min., Geol.*

2270. READ, MATTHEW C., A.M., Hudson, O. *Zoöl., Geol., Archæo.* Coll. Ex.

2271. READ, SAMUEL B., Needham, Mass. *Bot.* Coll. Ex.

2272. READ, W. H. A., 9 Gradolph Block, Toledo, O *Coleoptera.* Ex.

2273. READIO, WILLIAM, Garnerville, Rockland Co., N. Y. *Nat. Hist., Micros.* Coll. Ex.

2274. READY, GEO. H., Santa Cruz, Cal. *Orn., Oöl.* Coll. Ex.

2275. REDDING, THOMAS B., A.M., New Castle, Ind. *Micros., Bot.*

2276. REDFIELD, JOHN H., 216 W. Logan Square, Phila., Pa. *Bot., Con.: Marginellidæ.* Coll.

2277. REED, Miss EVA M., Hudson, Mass. *Phæn. Bot.* Coll. Ex.

2278. REED, E. BAYNES, Ass't Editor "Canadian Entomologist," London, Ontario, Can. *Ent.*

2279. REGAL, EDWIN, Oberlin, O. *Ent.* Coll. Ex.

2280. REIFF, ISAAC, 1233 Potts St., Phila., Pa. *Orn.* Coll. Ex.

2281. REINECKE, OTTOMAR, 500 Main St., Buffalo, N. Y. *Coleoptera.* Coll. Ex.

2282. REINHOLD, ELI S., Mahanoy City, Pa. *Min.* Coll. Desires to exchange *Fossils* for *Minerals*, especially fossils of Coal formation.

2283. REINMANN, A. L., 14 Bond St., N. Y. City.
2284. REPPERT, FERDINAND, Muscatine, Iowa. *Bot.*, *Coleoptera.* Coll. Ex.
2285. REVERCHON, J., Dallas, Texas. *Phæn.Bot.*, *Ferns.* Coll.
2286. REYNOLDS, Prof. H. S., M.S., Urbana, Ill. *Phæn.Bot.*, *Ferns*, *Ent.* Coll. Ex.
2287. REYNOLDS, Miss MARY C., St. Augustine, Fla. *Phæn. Bot.*, *Ferns.* Coll.
2288. REZNER, W. B., M. D., 306 Euclid Ave., Cleveland, O. *Gen.Biol.*, *Medical Microscopy.*
2289. RICE, C. S., Niagara Falls, Niagara Co., N. Y. *The Game Fish of Niagara.*
2290. RICE, HENRY J., Fellow in Nat. Hist., Johns Hopkins Univ., Baltimore, Md. *Gen.Biol.*, *Emb.*
2291. RICE, WILLIAM N., Prof. of Nat. Hist., Wesleyan Univ., Middletown, Conn. *Geol.*, *Zoöl.*
2292. RICH, GUY C., Saratoga Springs, N. Y. *Oöl.*, *Tax.* Coll. Ex.
2293. RICH, Dr. JOHN B., 12 E. 22nd St., New York City. *Micros.*
2294. RICH, WALDO L., Saratoga Springs, N. Y. *Zoöl.*, *Orn.*, *Oöl.* Coll. Ex.
2295. RICHARDS, ROBERT H., Prof. of Mining and Min., Mass. Inst. Technol., Boston, Mass. *Metallurgy.* Coll.
2296. RICHARDS, MRS. R. H., Mass. Inst. Technol., Boston, Mass. *Min.* Coll. Ex.
2297. RICHARDSON, E., 1300 Market St, Wheeling, W. Va. *Bot.* Coll. Ex.
2298. RICHARDSON, F. C. A., M. D., East St. Louis, Ill. *Archæo.* Coll. Ex.
2299. RICHARDSON, H. S., Cambridgeport, Mass. *Bot.* Coll.
2300. RICHARDSON, JENNESS, Rutland, Vt. *Mam.*, *Orn.*, *Oöl.*, *Min.* Coll. Ex.
2301. RICHARDSON, J. G., M. D., Prof Univ. of Pa., 1835 Chestnut St., Phila., Pa. *Micros.*, *Gen.Biol.*, *Histol. of Vert.* Coll.
2302. RICHMOND, M. S., Box 300, Toronto, Can. *Orn.*
2303. RICHTER, FRANK C., Ashbourne, Montgomery Co., Pa. *Coleoptera*, *Lepidoptera*, *Photog.* Coll. Ex.
2304. RICKETTS, P. DE P., E. M., Ph.D., Columbia Coll., New York City. *Min.*, *Metall.* Coll. Ex.
2305. RICKSECKER, EDMUND, Nazareth, Pa. *Oöl.* Coll. Ex.

2306. RICKSECKER, L. EDGAR, 34 Market St., San Francisco, Cal. *Coleoptera.* Coll. Ex.

2307. RIDDELL, WM. R., A. B., B. Sc., F. B. S., Prof. of Math., Normal School, Ottawa, Can. *Bot., Min., Geol.* Coll. Ex.

2308. RIDGWAY, ROBERT, Smithsonian Inst., Washington, D. C. *Orn., Geog. Distrib.* Coll.

2309. RILEY, C. V., M. A., Ph.D.; Chief U. S Entom. Commission, Entomologist, Dep't of Agric., Washington, D. C. *Articulates; General and Economic Ent.; Bot.* Desires Diptera, and Galls and gall-insects of all orders.

2310. RINEDOLLAR, NELSON, M.D., Mt. Carroll, Ill. *Palæo.* Coll. Ex.

2311. RINER, W. W., Greene, Butler Co., Iowa. *Micros.*

2312. RITCHIE, J., jr., Box 2725, Boston, Mass. *Min., Mollusca.* Coll. Ex.

2313. ROBERTS, C. H., Sup't City Schools, Rochester, Minn. *Bot., Geol.* Coll. Ex.

2314. ROBERTS, G. A., Leicester, Vt. *Oöl.* Coll. Ex.

2315. ROBERTS, Prof. G. S., E. M., C. E., 88 Union Ave., Brooklyn E. D., N. Y. *Geol., Min.*

2316. ROBERTS, J. B., Indianapolis, Ind. *Micros.*

2317. ROBERTS, Mrs. MARIE ANTOINETTE, Rochester, Minn.

2318. ROBERTS, M. JOSIAH, M. D., 33 E. 29th St., New York City. *Anthro.* Coll.

2319. ROBERTS, THOS S., 27 No. 8th St., Minneapolis, Minn. *Orn., Bot.* Coll. Ex.

2320. ROBERTSON, ROB'T S., Fort Wayne, Ind. *Geol., Anthro.* Coll.

2321. ROBINSON, C. H., 8 Rouse Block, Cleveland, O. *Micros.*

2322. ROBINSON, Rev. EDW. S., Enterprise, Clark Co., Miss. *Bot., Geol.* Coll.

2323. ROBINSON, F. C., Bowdoin Coll., Brunswick, Me. *Min.*

2324. ROBINSON, JOHN, Treas. Peab. Acad. of Sci., Salem, Mass. *Bot.: Flora of Essex Co., Mass., and Ferns in general.*

2325. ROBINSON, J. R., Woonsocket, R. I. *Geol., Min.* Coll. Ex.

2326. ROEBLING, W. A., C. E., 110 Columbia Heights, Brooklyn, N. Y. *Min.* Coll. Ex.

2327. ROGERS, D. D., Daytona, Fla. *Geol.*

2328. ROGERS, J. E., Maryville Coll., Maryville, E. Tenn. *Geol.*, *Min.*, *Palæo.*, *Micros.*, *Mam.*, *Reptiles.* Coll. Ex.

2329. ROGERS, WILLIAM BARTON, Pres. Mass. Inst. Technol., 117 Marlborough St., Boston, Mass. *Geol.*, *etc.*

2330. ROGERS, WILLIS, Grand Rapids, Mich. *Ent.* Coll.

2331. ROHMER, F. J. B., M. D., Springhill Coll., near Mobile, Ala. *Bot.* Coll.

2332. ROMINGER, CHAS., State Geologist of Mich., Ann Arbor, Mich. *Palæo.*, *Geol.* Coll. Ex.

2333. RONEY, Prof. H. B., East Saginaw, Mich. *Nat. Hist.*, *Min.* Coll.

2334. ROOP, C., Taxidermist, Proprietor of Oregon Mus., Portland, Oregon. *Gen. Nat. Hist.*, *Zoöl.*, *Orn.*, *Ent.*, *Indian Relics.* Coll. Ex.

2335. ROOSEVELT, THEODORE, 6 W. 57th St., New York City. *Vertebrates.* Coll. Ex.

2336. ROOT, CHAS. G., Waterbury, Conn. *Min.*, *Geol.*, *Sociology.*

2337. ROOT, Mrs. E. H., De Kalb, Ill. *Gen. Nat. Hist.*

2338. ROPER, EDWARD W., Winthrop Ave., Revere, Mass. *Con.* Coll. Ex.

2339. ROSAMOND, WM. B., M. D., Milnersville P. O., New Birmingham, Guernsey Co., O. *Geol.*, *Min.*, *Palæo.* Coll. Ex.

2340. ROSE, D. L., Mankato, Minn. *Orn.* Coll. Ex.

2341. ROSKRUGI., GEO. J., Tucson, Arizona Terr. *Min.* Coll. Ex.

2342. ROTHROCK, J. T., M. D., Prof. of Bot., Univ. of Pa., West Chester, Pa. *Bot.*

2343. ROUNDS, Mrs. H. B., Box 876, Dover, N. H. *Geol.*, *Min.*, *Con.*, *Mosses.* Coll. Ex.

2344. ROW, AMOS, Postville, Iowa. *Micros.*

2345. ROWE, RICHARD, Lachine, Quebec, Can. *Orn.*, *Oöl.*

2346. ROWELI., FRANK B., C. E., Lynn, Mass. *Min.*: *Lithol.* Coll. Ex.

2347. ROWLAND, H., jr., Frankford, Phila., Pa.

2348. ROY, Mrs. JESSE D., Royston Park, Owen Sound, Ontario, Can. *Phæn. Bot.*, *Ferns*, *Mosses*, *Fungi*, *Algæ*, *Lichens*, *Hepaticæ*, *Cyperaceæ.* Coll. Ex.

2349. RUDKIN, WILLIAM H., 74 William St., New York City. *Phæn. Bot.*, *Ferns.* Coll.

2350. RUGER, M., 54 Tompkins St., New York City. *Bot.* Coll. Ex.

2351. RUGGLES, BYRON P., Hartland Four Corners, Vt. *Con., Oöl., Ent.* Coll. Ex.
2352. RUNDSTRÖM. JOHN, Lindsborg, McPherson Co., Kans. *Bot.* Coll.
2353. RUSBY, H. H., Franklin, Essex Co., N. J. *Bot.* Ex.
2354. RUSSEL, EDWARD C., Ithaca, N. Y. *Orn., Oöl.* Coll.
2355. RUSSELL, BARRETT B., State Normal School, Bridgewater, Mass. *Ent.* Coll.
2356. RUSSELL, I. C., Prof. of Geol, Woodruff Scientific Exped. Address Plainfield, N. J. *Geol., Palæo.*
2357. RUST, ALBERT D., Fort Worth, Texas. *Palæo.* Cretaceous Fossils of Texas; also rare Southern woods for cabinets in exchange for desirable specimens. Coll. Ex.
2358. RUST, Mrs. STILES M., 112 E. Genesee St., Syracuse, N. Y. *Bot.: Filices, Musci, Hepaticæ.* Coll.
2359. RUTHERFORD, N. L., New York City. *Micros.*
2360. RYDER, JOHN A., Acad. Nat. Sci., Phila., Pa. *Thysanura, Collembola, Aptera and insect parasites.* Ex.
2361. SABIN, A. H., Prof. of Nat. Sci., Ripon Coll., Ripon, Wis. *Bot., Invert. Palæo., Crystallog.* Coll. Ex.
2362. SACHS, HERMAN, 96 Bloomfield St., Hoboken, N. J. *Lepidoptera, Coleoptera.* Coll. Ex.
2363. SADTLER, Prof. SAM'L P., Univ. of Pa., West Chester, Pa.
2364. SAFFORD, JAMES M., A. M., M. D., Ph. D., Prof. Vanderbilt Univ., Nashville, Tenn. *Nat. Hist., Bot., Geol., Min.* Coll. Ex.
2365. SAGE, E. O., Rochester, N. Y.
2366. SAGE, JNO. H., Portland, Conn. *Orn.*
2367. SAGUIN, Dr., 58 W. 26th St., N. Y. City. *Micros.*
2368. SALISBURY, HENRY C., Florenceville, Howard Co., Iowa.
2369. SALISBURY, STEPHEN, jr., Worcester, Mass. *Anthropol., Archæo., Ethnol.* Coll.
2370. SALISBURY, Prof. J. W., Cleveland, O. *Micros.*
2371. SALLERS, COLEMAN, 16th & Hamilton Sts., Phila., Pa. *Micros.*
2372. SALTZWEDEL, HENRY, M. D., 58 Union Ave., Brooklyn E. D., N. Y. *Micros., Coleoptera.* Coll. Ex.
2373. SAMPSON, F. A., A. M., LL. B., Sedalia, Mo. *Palæo., Coleoptera, Lepidoptera; Land Shells: Testudinata; Oöl.* Coll. Ex.

2374. SAMPSON, IRA B., 157 Lancaster St., Albany, N. Y. *Micros.*

2375. SAMPSON, James, New Harmony, Ind.

2376. SAMUEL, F., Box 621, Auburn, N. Y. *Orn.*, *Oöl.* Coll. Ex.

2377. SAMUELS, E. A., Boston, Mass. *Orn.*, *Emb.*

2378. SANBORN, FRANCIS GREGORY, Consulting Naturalist, Andover, Mass. *Biol.*, *Agric. Ent.*

2379. SANBORN, JAMES GODFREY, East Weymouth, Mass. *Min.* Coll. Ex.

2380. SANDERSON, C. H. K., Prin. High Sch., Box 523, Greenfield, Mass. *Bot.* Coll. Ex.

2381. SANFORD, JAMES A., Toledo, O. *Bot.* Ex. *local and British Phænogams.*

2382. SANFORD, O. N., C. E., El Cajon, San Diego Co., Cal. *Gen. Nat. Hist. of San Diego County.* Ex. in Shells and Coleoptera.

2383. SARGENT, CHAS. S., Director Botanic Garden and Arboretum of Harv. Univ., Brookline, Mass. *Bot.*

2384. SARGENT, PORTER, Merrimac, Mass. *Geol.* Coll.

2385. SATTERTHWAITE, THOS. E., M. D., 50 E. 31st St., New York City. *Micros.*

2386. SAUNDERS, ERNEST C., Prof. of Bot., 11 Baile St., Montreal, Can. *Bot.: Medicinal Plants.* Coll.

2387. SAUNDERS, THOS. H., Phila., Pa. *Micros.*

2388. SAUNDERS, WILLIAM, London, Can. *Ent.* Coll.

2389. SAUNDERS, W. E., London, Can. *Orn.*, *Oöl.*, *Ent.* Coll. Ex.

2390. SAUNDERSON, R. C., City Sup't of Schools, Burlington, Iowa. *Geol.* Coll. Ex.

2391. SAWYER, GEO. F., A. B., Belleville, Jefferson Co., N. Y. *Invert. Palæo.*, *Min.* Coll. Ex.

2392. SAYLER, M., Ladoga, Ind. *Bot.*, *Palæo.*, *Articulates*, *Mollusks*, *Radiates*, *Sponges*, *Protozoa*, *Infusoria.* Coll. Ex.

2393. SCARBOROUGH, G., Vineland, N. J. *Bot.*, *Geol.*, *Con.* Coll.

2394. SCHAEFFER, E. M., M. D., 1115 F St. N. W., Washington, D. C. *Micros.*, *Gen. Biol.*, *Vert. Emb.*, *Histol. of Vert.*, *Entozoa.* Coll. Ex.

2395. SCHAFFER, CHAS., M.D., 1309 Arch St., Phila., Pa. *Bot.*

2396. SCHAFHIRT, FREDERIC, M. D., 631 M St. N. W., Washington, D. C. *Vertebrates; Ent.: Coleoptera*, *Lepidoptera.* Coll.

2397. SCHAUPP, Prof. F. G., 9 Broadway, Brooklyn E. D., N. Y. *Coleoptera.* Ex.

2398. SCHAUS, WILHELM, jr., Exeter, N. H. *Ent.: Lepidoptera, Coleoptera.* Coll. Ex.

2399. SCHICK, W. H., M. D., 108 Cottage Grove Ave., Chicago, Ill. *Orn.*

2400. SCHICKEL, EDWARD B., 119 Broadway, cor. Elm St., Buffalo, N. Y. *Min., Micros.* Coll.

2401. SCHILLING, J. P., M. D., Louisville, O. *Orn.*

2402. SCHIMMEL, J. O, 431 Master St., Phila., Pa. *Bot., Micros.*

2403. SCHINER, J. F. L., U. S. Mint, Denver, Colo. *Micros.*

2404. SCHLEMMER, CHAS., Esq., 460 Sycamore St., Cincinnati, O. *Min., Palæo., Con.* Coll. Ex.

2405. SCHLEY, WM. S., Ass't State Geologist, Atlanta, Ga. *Invert. Palæo., Geol., Min., Metall.* Coll. Ex.

2406. SCHMIDT, Dr. H. D., New Orleans, La. *Micros.*

2407. SCHNECK, J., M. D., Mt. Carmel, Ill. *Bot., Anthro., Vert.* Coll. Ex.

2408. SCHNUR, WM., Warren, Pa. *Micros.* Coll. Ex.

2409. SCHOCK, OLIVER D., Hamburg, Pa.

2410. SCHOENEY, L., M. D., 970 Lexington Ave., N. Y. City. *Phæn. Bot., Micros., Osteol.* Coll.

2411. SCHOENFELD, JOHN, M. D., 118 So. 9th St., Reading, Pa. *Geol., Min.* Coll. Ex.

2412. SCHOOLEY, W. D., Richmond, Ind. *Bot.: Ferns, Mosses, Fungi, Algæ; Geol., Min., Archæo.* Coll. Ex.

2413. SCHOR, R. F., Evansville, Ind. *Marine Zoöl., Con.* Coll.

2414. SCHOWALTER, E. R., M. D., Point Clear, Baldwin Co., Ala. *Palæo., Geol., Min., Metall., Emb., Anthro., Coleoptera, Arachnida.* Coll. Ex.

2415. SCHRAMER, L., 42 Nassau St., New York City. *Micros.*

2416. SCHRENK, JOSEPH, College Point, Queens Co., N. Y. *Bot., Micros.*

2417. SCHUCHERT, C., Cincinnati, O. *Ex. for Palæozoic Fossils.*

2418. SCHULER, G., 500 Main St., Buffalo, N. Y. *Coleoptera.* Coll.

2419. SCHULTZE, E., 636 Third Ave., New York City. *Bot., Ent.* Coll.

2420. SCHUSTER, MORITZ, 614 So. 4th St., St. Louis, Mo. *Coleoptera.* Coll. Ex.

2421. SCHUSTER, THEO., 419 Herkimer St., Brooklyn, N. Y. *Bot.* Coll. Ex.

2422. SCHWARZ, E. A., Detroit, Mich. *Ent.: Coleoptera.* Ex.

2423. SCHWEITZER, Prof. PAUL, State Univ. of Mo., Columbia, Mo.

2424. SCHWENSEN, F. M., Housatonic, Mass. *Coleoptera.* Coll. Ex.

2425. SCHWINN, J. W., jr., Buffalo, N. Y. *Coleoptera.* Coll. Ex.

2426. SCIVENSON, J. M. L., Box 3952, New York City. *Coleoptera: Scarabæidæ.* Ex.

2427. SCOFIELD, Rev. WM. C., Owego, N. Y.

2428. SCOLLICK, JOS. W., 49 Asylum St., Rochester, N. Y. *Osteol.*

2429. SCOON, JAMES H., M. D., Amsterdam, N. Y. *Micros.*

2430. SCOTT, A. E., Lexington, Mass. *Bot.: Ferns.* Coll.

2431. SCOTT, D. B., 61 Broadway, New York City. *Micros.* Coll. Ex.

2432. SCOTT, GEO. B., Westfield, N. J. *Micros.*

2433. SCOTT, J. G., Westfield, Mass. *Phæn.Bot., Zoöl.* Coll. Ex.

2434. SCOTT, W. E. D., Curator Mus. of Biol., Princeton Coll., Princeton, N. J. *Gen.Biol.* Spec.—*Orn.*

2435. SCOVELL, J. T., Prof. Nat. Sci., Ind. State Normal School, Terre Haute, Ind. *Ferns.* Coll. Ex.

2436. SCOVILLE, S. S., M. D., Lebanon, O. *Horticulture. Palæo., Gen.Biol., Archæo.* Coll. Ex.

2437. SCRIBNER, F. LAMSON, Girard Coll., Phila., Pa. *Phæn. Bot: Gramineæ.* Coll. Ex.

2438. SCRIBNER, G. HILTON, 54th St. & 10th Ave., N. Y. City.

2439. SCUDDER, NEWTON P., Middletown, Conn. *Emb.* Coll. Ex.

2440. SCUDDER, SAM'L H., Cambridge, Mass. *Gen. Zoöl.: Fossil Insects; Orthoptera, Butterflies.*

2441. SCUPHAM, JNO. R., Ass't Engineer C. P. R. R., San Francisco, Cal. *Min., Bot., Nat. Hist.* Coll. Ex.

2442. SEAMAN, E. C. (Author of "A New Theory of Light"). Ann Arbor, Mich.

2443. SEAMAN, WM. H., 1424 11th St., Washington, D. C. *Crypt.Bot., Micros.*

2444. SEARS, JOHN F., Oneida Community, Oneida, N. Y. *Micros.* Coll. Ex.

2445. SEARS, JOHN H., Danvers, Mass. *Bot.: Shrubs and Trees.* Coll. Ex.
2446. SEEBER, ERNEST. 939 So. 2nd St., Phila., Pa. *Ent.: Coleoptera, Lepidoptera.* Coll. Ex.
2447. SEEGER, C. L., 70 Temple St., Springfield, Mass. *Phæn. Bot.*
2448. SEEGER, EDWARD W., 70 Temple St., Springfield, Mass. *Phæn. Bot., Ferns, Orn.* Coll. Ex.
2449. SEELY, HENRY M., Prof. in Middlebury Coll., Middlebury, Vt. *Bot.* Coll.
2450. SEELYE, C. W., Box 414, Rochester, N. Y. *Phæn. Bot., Ferns, Horticulture.*
2451. SEIBER, W. F., Fennville, Allegan Co., Mich. Coll.
2452. SEILER, CARL, M. D., 1608 Pine St., Phila., Pa. *Histol. of Vert.*
2453. SEISS, C. FEW, 1338 Spring Garden St., Phila., Pa. *Gen. Zoöl., Herpetol.* Coll. Ex.
2454. SELDEN, JAMES, 116 E. 5th St., Cincinnati, O. *Palæo., Mollusks.*
2455. SELTZER, JNO. A., Lebanon, Pa.
2456. SELWYN, A. R. C. (Geolog. Surv. of Can.), Montreal, Ontario, Can. *Geol.*
2457. SEMPLE, WM. S., Easton, Pa. *Oöl.* Coll. Ex.
2458. SENNETT, GEO. B., Meadville, Pa. *Orn., Oöl., Lepidoptera.* Coll. Ex.
2459. SESSIONS, Miss KATE O., 1428 7th Ave., East Oakland, Cal. *Ferns, Min., Ent., Mollusks.* Coll. Ex.
2460. SEVERANCE, Rev. M. L., Orwell, Addison Co., Vt. *Geol., Min.* Coll. Ex.
2461. SEYMOUR, ARTHUR B., Champaign, Ill. *Bot.: Ferns.* Coll. Ex
2462. SEYMOUR, Rev. E., 47 Murray St., New York City.
2463. SEYMOUR, GEO. W., Taylor's Falls, Chisago Co., Minn. *Archæo.* Coll. Ex.
2464. SHALER, N. S., Prof. of Palæo., Harvard Univ., Cambridge, Mass. *Geol., Palæo.*
2465. SHALLCROSS, JOHN, 4610 Frankford Ave., Phila., Pa. *Ent., Min., Con.* Coll.
2466. SHANNON, W.P., A. M., Greensburg, Decatur Co., Ind. *Phæn. Bot., Invert. Palæo.* Coll.
2467. SHARKS, EBENEZER, Indianapolis, Ind. *Micros.*
2468. SHARP, Prof. S. Z., Maryville, Blount Co., Tenn. *Geol., Con.* Coll. Ex.

2469. SHARPLES, Prof. S. P., A. B., 114 State St., Boston, Mass. *Geol.*, *Lithol.*, *Micros.*

2470. SHAW, C. JAY, Pottersville, Warren Co., N. Y. *Oöl.*, *Ent.*, *Min.*; *Trees, shrubs and woods.* Coll. Ex.

2471. SHAW, Hon. JAMES, Mt. Carroll, Ill. *Geol.*

2472. SHAW, JAMES M., So. Waterford, Me. *Min.* Coll. Ex.

2473. SHAW, R. T., Waynesville, O. *Geol.* Coll. Ex.

2474. SHEAFER, P. W., Pottsville, Pa. *Coal and Iron Geol.* Coll. Ex.

2475. SHEAHAN, J. P., A. M., M. D., Dennysville, Me. *Invert. Palæo.*, *Lithol.*, *Archæo.*, *Orn.*, *Mollusks.* Coll. Ex.

2476. SHELDON, D. S., A. M., LL.D., Prof. Griswold Coll., Davenport, Iowa. *Gen. Nat. Hist.*; *Con.* Coll. Ex.

2477. SHELDON, JOHN S., Loda, Iroquois Co., Ill. *Ent.* Coll.

2478. SHELTON, Mrs. W. S. C., Dunkirk, N. Y. *Micros.*

2479. SHEPARD, ARTHUR, Santa Cruz, Cal. *Algæ*, *Micros.* Coll. Ex

2480. SHEPARD, EDW. M., Prof. of Nat. Sci., Drury Coll., Springfield, Mo. *Cryptogams*, *Min.* Coll.

2481. SHEPARD, JAMES, Box 826, New Britain, Conn. *Min.* Coll. Ex.

2482. SHEPARD, LUCIUS G., Pottstown, Montgomery Co., Pa. *Micros.*

2483. SHEPHERD, M. WALLACE, Rochester, O. *Min.*, *Geol*, *Bot.* Coll. Ex.

2484. SHEPPARD, EDWIN, 2025 No. 17th St., Phila., Pa. *Vertebrates*, *Orn.* Coll.

2485. SHEPPARD, Dr. MARK, Alfred, N. Y. *Orn.*

2486. SHERMAN, B. F., Ogdensburg, N. Y. *Micros.*

2487. SHERMAN, LEWIS, A. M., M. D., Milwaukee, Wis. *Bot.*

2488. SHERMAN, SANFORD F., New Hartford, Oneida Co., N. Y. *Oöl.* Coll. Ex.

2489. SHERRIFF, F. A., Maverick Nat. Bank, Boston, Mass. *Coleoptera.* Coll. Ex.

2490. SHERRILL, J. E., Danville, Ind. *Gen. Biol.*, *Geog. Distrib.* Coll.

2491. SHERWOOD, ANDREW, Mansfield, Tioga Co., Pa. *Geol.*, *Palæo.*, *Archæo.* Coll. Ex.

2492. SHIELDS, HOWARD H., Troy, N. Y. *Oöl.*

2493. SHIMER, HENRY, M. D., Mt. Carroll, Carroll Co., Ill. *Orn.*, *Ent.*

2494. SHOALS, GEO. H., Easthampton, Mass. *Oöl.* Coll. Ex.

2495. SHOCKLEY, W. H., New Bedford, Mass. *Ent.*; *Ferns.* Exchange for Ferns from the South and West.

2496. SHOMAS, B. W., 918 Indiana Ave., Chicago, Ill. *Diatoms, Micros.* Coll.

2497. SHORES, E. I., M. D., Suffield, Conn. *Orn.* Coll.

2498. SHORT, Prof. JOHN T., 229 E. Broad St., Columbus, O. *Amer. Archæo. and Ethnol.*

2499. SHORT, Rev. WILLIAM, Trinity Chapel, Brooklyn, N. Y. *Phæn. Bot., Micros.* Coll. Ex.

2500. SHORTEN, JOHN W., Taxidermist, 191 W. 4th St., Cincinnati, O. *Orn., Ent.*

2501. SHRIVER, HOWARD, Wytheville, Wythe Co., Va. *Phæn. Bot., Ferns.* Coll. Ex.

2502. SHROCK, FRANK H., M. D., So. Pueblo, Colo. *Archæo., Palæo., Osteol.* Coll. Ex.

2503. SHROYER, J. C., 365 W. Court St., Cincinnati, O. *Palæo.* Coll. Ex.

2504. SHULKE, Rev. Prof. PAUL, Pekin, Tazewell Co., Ill. *Geol., Con., Bot.* Coll. Ex.

2505. SHULTZ, C. S., Rec. Sec., N. Y. Miscroscopical Society, Hoboken, N. J. *Desmids, Diatoms, Micros., Gen. Biol., Infusoria.* Coll.

2506. SHUMARD, Mrs. Warren, Richmond, Ind. *Geol., Palæo.* Coll. Ex.

2507. SIAS, SOLOMON, A. M., M. D., Schoharie, N. Y. *Geol., Palæo.* Coll.

2508. SIBLEY, P. B., Deadwood, Dakota Terr.

2509. SIDLE, JOHN W., Phila., Pa. *Micros.*

2510. SIEWERS, C. G., Box 23, Newport, Ky. *Ent.* Coll.

2511. SILER, A. L., Ranch, Kane Co., Utah Terr. *Bot., Con., Palæo., Nat. Hist., Indian Relics, Ent.*

2512. SILER, J., 1242 Broadway, St. Louis, Mo.

2513. SILL, J. M. B., Detroit, Mich. *Orn., Zoöl.*

2514. SILLIMAN, Prof. B., Yale Coll., New Haven, Conn. *Min., Metall.*

2515. SILLIMAN, J. M., Easton, Pa. *Micros.*

2516. SIMES, J. HENRY C., M. D., Phila., Pa. *Micros.*

2517. SIMON, HARRY L., Lancaster City, Pa. *Min., Oöl., Geol., Indian Antiquities.* Coll.

2518. SIMON, W. Ph. D., 10 Block St., Baltimore, Md. *Min.* Coll. Ex.

2519. SIMMONS, HENRY M., Kenosha, Wis. *Micros.* Coll. Ex.

2520. SIMONDS, FRED'K W., M. S., Prof. of Zoöl., Geol., and Bot., Univ. of N. C., Chapel Hill, N. C. *Invert. Palæo., Geol.* Coll.

2521. SINGLETON, M. T., Atlanta, Ga. *Palæo.* Coll. Ex.

2522. SIZER, Dr. M. B., 336 Green Ave., Brooklyn, N. Y. *Micros.*

2523. SKARSTEDT, ERNST, Lindsborg, McPherson Co., Kans. *Mam., Orn., Gasteropoda, Bot.* Coll.

2524. SKELTON, JOHN L., 169 La Salle St., Chicago, Ill. *Orn., Tax.* Coll. Ex.

2525. SKIFF, M. M., Jamestown, N. Y.

2526. SKINNER, A. G., M. D., Youngstown, Niagara Co., N. Y. *Bot.*

2527. SKINNER, M. J., Atco, N. J.

2528. SLADE, ELISHA, Somerset, Mass. *Nat. Hist. of the Farm: Zoöl.*

2529. SLATE, Prof. S., Univ. of Cal., Berkeley, Cal.

2530. SLEEPER, FRANK S., Galesburg, Mich. *Coleoptera.* Coll.

2531. SLOAN, JOHN M., M. D., New Albany, Ind. *Micros., Ichth., Crustacea.* Ex.

2532. SLOCUM, Dr. C. E., Shelbyville, Ind. *Micros.*

2533. SMALL, H. BEAUMONT, Ottawa, Can. *Bot.*

2534. SMITH, BENJ. H., 705 Walnut St., Phila., Pa. *Coleoptera.*

2535. SMITH, Rev. C. D., Franklin, N. C. *Geol., Min.* Coll. Ex.

2536. SMITH, CHAS. E., 216 So. 15th St., Phila., Pa. *Phæn. Bot., Ferns.* Coll.

2537. SMITH, CHAS. N., L. B. 1011, Delaware, O. *Min., Geol.* Coll. Ex.

2538. SMITH, C. M., Rockford, Ill.

2539. SMITH, Mrs. EMILY, Jersey City, N. J. *Nat. Hist.*

2540. SMITH, Miss EMMA A., 136 Moss St., Peoria, Ill. *Economic Ent.: Hymenoptera.* Ex.

2541. SMITH, Mrs. ERMINNIE A., 203 Pacific Ave., Jersey City, N. J. *Min., Geol.* Coll. Ex.

2542. SMITH, EDWIN F., Hubbardston, Ionia Co., Mich. *Bot.* Coll. Ex.

2543. SMITH, EUGENE A., Ph.D., State Geologist, Prof. of Geol. in Univ. of Ala., Tuscaloosa, Ala. *Phæn. Bot., Ferns, Min., Geol.* Coll.

2544. SMITH, EVERETT, C. E., Portland, Me. *Min., Ichth., Oöl.* Coll. Ex.
2545. SMITH, Mrs. E. A., Dublin, Ind. *Ferns, Mosses.*
2546. SMITH, E. J., Taxidermist, Natick, Mass. *Orn., Mam., Con., Lepidoptera.* Coll. Ex.
2547. SMITH, E. KIRBY, Prof. Univ. of the South, Sewanee, Tenn. *Phæn.Bot.: Crypt.Bot.: Ferns, Mosses, Desmids, Diatoms; Micros., Orn., Coleoptera, Lepidoptera, Mollusks.* Coll. Ex.
2548. SMITH, FRANK, 514 Lexington St., Baltimore, Md. *Ferns, Horticulture.*
2549. SMITH, FRED. E., Ithaca, N. Y. *Geol.* Coll. Ex.
2550. SMITH, FRED SUMNER, 78 Trumbull St., New Haven, Conn. *Orn., Reptiles, Amphibians.* Coll.
2551. SMITH, F. C., Bridgeport, Conn. *Ent.* Coll. Ex.
2552. SMITH, F. H., Prof. Univ. of Va., Charlottesville, Va. *Geol.*
2553. SMITH, GEO. C., Litchfield, Me. *Min.* Coll. Ex.
2554. SMITH, GEO. D., 194 Washington St, Boston, Mass. *Ent.: Coleoptera.* Coll.
2555. SMITH, GEO. L., State Normal Sch., Baltimore, Md. *Bot.; Ent.: Neuroptera.* Coll. Ex.
2556. SMITH, GREENE, A. M., Peterboro, Madison Co., N. Y. *Orn.* Coll.
2557. SMITH, G. A., Fort Wayne, Ind. *Orn., Tax.* Coll. Ex.
2558. SMITH, HAMILTON L., Prof. Nat. Philos., Hobart Coll., Geneva, N. Y. *Crypt.Bot.: Algæ, Desmids, Diatoms; Foraminifera, Micros.* Coll. Ex.
2559. SMITH, HERBERT W., Box 2621, St. Paul, Minn. *Min.: Lithol.* Coll. Ex.
2560. SMITH, H. S., 306 Pine St., San Francisco, Cal. *Min.* Coll. Ex.
2561. SMITH, JOANNA F., Box 615, Worcester, Mass. *Bot., Min.* Coll. Wild Plants and Ferns of N. E. for exchange.
2562. SMITH, J. ALDEN, State Geologist, Boulder, Colo. *Min., Geol.* Coll. Ex.
2563. SMITH, J. DONNELL, 75 Park St., Baltimore, Md. *Bot.: Ferns, Mosses, Algæ.* Coll.
2564. SMITH, J. EDWARDS, M. D., Cleveland, O.
2565. SMITH, J. LAWRENCE, Louisville, Ky. *Min.*
2566. SMITH, J. B., M. D., Amherst, Mass. *Gen. Biol., Anthro.*
2567. SMITH, MANASSEH, Portland, Me.

2568. SMITH, MINNA C., Englewood, Cook Co., Ill. *Zoöl.*
2569. SMITH, NORMAN A., Frelighsburg, Quebec, Can. *Rock System of Eastern Canada.* Coll.
2570. SMITH, ROB'T D., in charge of Athenæum Mus., Columbia, Tenn. *Min., Archæo., Mollusks.* Coll. Ex.
2571. SMITH, Miss ROSA, San Diego, Cal. *Bot.: Marine Algæ, Ferns.* Coll. Ex.
2572. SMITH, SIDNEY I., Prof. Comp. Anat., Yale Coll., New Haven, Conn. *Gen. Biol., Crustacea.*
2573. SMITH, Prof. T. BERRY, Glasgow, Mo. *Min.*
2574. SMITH, Prof. URIAH, Battle Creek, Mich.
2575. SMITH, WM. AUSTIN, M. D., Ph.D., M. A., Sec'y Athenæum, Columbia, Tenn. *Archæo.* Coll.
2576. SMITH, WM. R., Curator Botanic Gardens, Washington, D. C. *Bot.*
2577. SMITH, W. H., M. D., Ph.D., 16 South University Ave., Ann Arbor, Mich. *Herpetol., Gen. Nat. Hist.*
2578. SMOCK, JNO. C., New Brunswick, N. J. *Geol.*
2579. SMUCKER, ISAAC, Newark, Licking Co., O. *Archæo., Geol., Palæo.*
2580. SMYTHE, Dr., Charity Hospital, New Orleans, La. *Micros.*
2581. SNOW, F. H., Prof. Nat. Hist., Univ. of Kans., Lawrence, Kans. *Bot., Orn.; Ent.: Lepidoptera and Coleoptera of Kansas and Colorado.* Coll. Ex.
2682. SNYDER, L. A., M. D., Ashland, Pa.
2583. SNYDER, Dr. T. J., Virginia City, Mason Co., Ill.
2584. SOMERS, JAMES O., Carbon Hill, Hocking Co., O. *Palæo., Geol., Min.* Coll. Ex.
2585. SOMERS, Prof. JOHN, M. D., 2 Brunswick St., Halifax, N. S. *Phæn.Bot., Ferns, Mosses, Fungi, Algæ, Gen.Biol.*
2586. SOTZEN, TRAUGOTT, Shelby, Richland Co., O. *Bot., Min., Geol.* Coll. Ex.
2587. SOUTHARD, EUGENE C., Kalamazoo, Mich. *Comp.Anat.*
2588. SOUTHWELL, J. H., Milan, Ill. *Bot., Palæo.* Coll. Ex.
2589. SOUTHWICK, J. M. (Southwick & Jencks), 283 Westminster St., Providence, R. I. *Min.* Coll. Ex.
2590. SOUTHWORTH, GEO. W., Needham, Mass. *Bot., Min.* Coll. Ex.
2591. SPAFFORD, FRED. A., Ludlow, Vt. *Orn.* Coll.
2592. SPALDING, Mrs. H. D., Schodiack Landing, N. Y.

2593. SPALDING, VOLNEY M., Ann Arbor, Mich. *Bot.: Fungi.*

2594. SPANG, NORMAN, Etna, Allegheny Co., Pa. *Min.* Coll. Ex. Desires to purchase specimens, in perfect condition, of finely crystallized minerals.

2595. SPAULDING, JUSTIN, Chicopee, Mass. *Micros.*

2596. SPAULDING, RANDALL, Montclair, Essex Co., N. J. *Bot.* Coll. Ex.

2597. SPAYDE, WM. H., Middletown, Dauphin Co., Pa. *Min., Geol.* Minerals, Rocks and Fossils for exchange.

2598. SPEERS, J. F., Memphis, Tenn. *Micros.*

2599. SPEIR, FRANCIS, jr., South Orange, N. J. *Vert. Palæo.*

2600. SPENCE, Mrs. E. JANE, Springfield, Clark Co., O. *Bot.: Ferns, Mosses, Hepaticæ, Lichens.* Coll. Ex.

2601. SPENCER, CHAS. A., Geneva, N. Y. *Manufacturer of Microscopes.*

2602. SPENCER, JOHN W., Paxtons, Sullivan Co., Ind. *Bot., Geol., Palæo., Archæo., Ent.* Coll. Ex.

2603. SPENCER, JOSEPH WM., B. A. Sc., Ph.D., F. G. S., Hamilton, Ontario, Can. *Geol., Palæo., Min.* Coll. Ex.

2604. SPERRY, JOSEPH H., Clinton, Conn. *Phæn. Bot., Crypt. Bot., Ferns.* Coll. Ex.

2605. SPOFFORD, AMOS L., Georgetown, Mass. *Bot., Orn.* Coll. Ex.

2606. SPRAGUE, CHAS. J., Globe Nat. Bank, Boston, Mass. *Lichens.* Coll.

2607. SPRAGUE, ISAAC, Grantville, Mass. *Botanical Artist.*

2608. SPRINGER, PHIL M., Springfield, Ill. *Ent., Con.* Coll.

2609. STADLMULLER, L., New Haven, Conn.

2610. STAEBNER, F. W., Rochester, Monroe Co., N. Y. *Min.*

2611. STANAGE, S. W., Walnut Hills, Cincinnati, O. *Geol., Mollusks.* Coll. Ex.

2612. STANDISKE, AUGUST, 3292 23rd St., N. Y. City.

2613. STANLEY, F. F., Swampscott, Mass. *Micros.* Coll. Ex.

2614. STANLEY, Prof. RICHARD C., Bates Coll., Lewiston, Me. *Geol.*

2615. STANTON, H. T., Frankfort, Ky.

2616. STANTON, J. Y., Prof. in Bates Coll., Lewiston, Me. *Orn., Oöl.* Coll. Ex.

2617. STARR, Mrs. AMORY R., Marshall, Harrison Co., Texas. *Geol.* Coll. Ex.
2618. STARR, E. S. *Ferns, Orn.* Coll.
2619. STARR, FREDERICK, Box 331, Auburn, N. Y., or East Ave., Rochester, N. Y. *Min., Palæo., Archæo.* Coll. Ex.
2620. STAUFFER, JACOB, Lancaster, Pa. *Bot., Ent.* Coll. Ex.
2621. ST. CYR, D. N., M. P. P., Str. de la Pérade, Quebec, Can.
2622. ST. CYR, Prof. NAPOLEON D. DE, Nicolet, Quebec, Can. *Bot., Ent.* Coll.
2623. STEACY, W. H., Tampa, Hillsborough Co., Fla. *Orn., Tax.*
2624. STEARNS, CHAS. A., 20 Mt. Vernon St., Charlestown, Mass. *Min., Mollusks.* Coll. Ex.
2625. STEARNS, D. B., 64 First Place, Brooklyn, N. Y. *Oöl., Orn., Min., Geol., Metall.* Coll. Ex.
2626. STEARNS, FREDERICK, Detroit, Mich. *Bot.*
2627. STEARNS, H. P., M. D., Hartford, Conn.
2628. STEARNS, R. E. C., Berkeley, Cal. *Geog. Distrib., Mollusca.* Coll.
2629. STEARNS, T. B., 64 First Place, Brooklyn, N. Y. *Orn., Oöl., Min., Geol., Metall.* Coll. Ex.
2630. STEARNS, W. A., Salem, Mass. *Gen. Nat. Hist.*
2631. STEBBINS, EDWARD S., 326 Nicollet Ave., Minneapolis, Minn. *Archæo., Oöl.* Coll. Ex.
2632. STEBBINS, FRED. B., Adrian, Lenawee Co., Mich. *Archæo., Geol.* Coll. Ex.
2633. STEBBINS, SOLOMON, Springfield, Mass. *Ferns.* Coll. Ex.
2634. STEELE, W. R., Chicago, Ill. *Micros.*
2635. STEERE, JOSEPH B., Ass't Prof. Zoöl. and Palæo., Univ. of Mich., Ann Arbor, Mich. *Systematic Zoöl.* Coll. Ex.
2636. STEINER, LEWIS H., M. D., Frederick City, Md. *Sanitary Science.*
2637. STEPHENSON, J. A. D., Statesville, N. C. *Min., Archæo.* Ex.
2638. STEPHENSON, WM., 119 State St., Portland, Me. *Oöl.* Coll. Ex.
2639. STERLING, E., Eagle Harbor, N. Y.
2640. STERLING, Dr. E., Cleveland, O. *Ichth.*

2641. STEVENS, E. C., Garnerville, Rockland Co., N. Y. *Ferns, Mosses, Fungi, Algæ, Min., Micros.* Ex.
2642. STEVENS, GEO. T., M. D., 47 Eagle St., Albany, N. Y. *Bot., Ophthal.* Coll. Ex.
2643. STEVENS, L. B., Box 76, Medina, N. Y. *Orn., Tax.* Coll. Ex.
2644. STEVENS, WINTHROP G., West Farms Station, New York City.
2645. STEVENS, Prof. W. J., Morris, Grundy Co., Ill. *Phæn. Bot., Lithol., Archæo.* Spec. — *Fossil Ferns and Shells.* Coll. Ex.
2646. STEVENSON, Prof. JOHN J., Univ. of N. Y., 314 W. 30th St., New York City. *Invert. Palæo., Geol.* Coll.
2647. STEVENSON, JAMES, Ass't U. S. Geolog. Survey, Washington, D. C. *Gen. Nat. Hist.*
2648. STEVENSON, WM. C., jr., 1525 Green St., Phila., Pa. *Fungi, Micros.* Coll. Ex.
2649. STEWARD, JOHN F., Plano, Kendall Co., Ill. *Palæo.* Coll. Ex.
2650. STEWART, J. T., M. D., Peoria, Ill. *Bot.* Coll.
2651. STILES, Dr. L. C., Owego, Tioga Co., N. Y.
2652. STILL, Mrs. M. C., 77 James St., Syracuse, N. Y. *Bot.* Coll. Ex.
2653. STILLMAN, A. F., A. B., Westerly, R. I. *Palæo., Orn.* Coll. Ex
2654. STILLSON, Dr. J. O., St. Louis, Mo. *Micros.*
2655. STIMPSON, CHAS. M., Peabody, Mass. *Bot.*
2656. STINSON, FLOYD, M. D., Evansville, Ind. *Archæo.* Coll. Ex.
2657. ST. JOHN, Miss MARY, Topeka, Kans. *Bot.*
2658. ST. JOHN, N. N., M. D., Wayland, Steuben Co., N. Y. *Micros.* Coll. Ex.
2659. ST. JOHN, Prof. ORESTES H., Topeka, Kans. *Palæo.*
2660. STOCKWELL, JAMES K., M. D., Oswego, N. Y. *Comp. Zoöl.* Coll.
2661. STODDER, CHAS., 131 Devonshire St., Boston, Mass. *Bot.: Diatoms; Geol., Micros.*
2662. STOKES, ALFRED C., Trenton, N. J. *Micros.*
2663. STOLLEY, GEORGE, Austin, Texas. *Palæo., Geol., Archæo.* Coll. Ex.
2664. STONE, ARTHUR R., Salem, Mass. *Bot.: Filices.* Coll. Desires to exchange.
2665. STONE, Prof. CHAS., Cooper Union, New York City.

2666. STONE, DWIGHT D., 193 E. 3rd St., Oswego, N. Y. *Orn., Oöl., Tax.* Coll. Ex.

2667. STONE, Prof. GEO. H., Kent's Hill, Me. *Phæn.Bot., Ferns, Surface Geol.* Coll.

2668. STONE, Mr. & Mrs. L., 1571 Indiana Ave., Chicago, Ill. *Bot., Geol.* Coll.

2669. STONE, Prof. ORMOND, Mt. Lookout, O.

2670. STONE, Dr. S. E., Walpole, Mass. *Micros.*

2671. STORER, D. H., Boston, Mass. *Ichth.*

2672. STORRS, C. H., Lebanon, N. H. *Orn., Mam., Tax.* Coll. Ex.

2673. STORRS, HENRY E., Prof. Nat. Sci., Ill. Coll., Jacksonville, Ill. *Min.* Coll. Ex.

2674. STOWELL, Prof. CHAS. H., M. D., Mich. Univ., Ann Arbor, Mich. *Micros.*

2675. STOWELL, Mrs. CHAS. H., Ann Arbor, Mich. *Micros.*

2676. STOWELL, T. B., A. M., Cortland, Cortland Co., N. Y. *Zoöl., Comp. Anat.* Coll.

2677. STOUT, ARTHUR B., M. D., Box 1739, San Francisco, Cal.

2678. STRAIGHT, Prof. H. H., Oswego, N. Y. *Zoöl., Bot., Geol.* Coll. Ex.

2679. STRATTON, C. L., Knoxville, Tenn. *Archæo.* Coll. Ex.

2680. STRATTON, F. A., Chattanooga, Tenn. *Geol., Min.*

2681. STRATTON, HATTIE R., Box 43, Grassy Cove, Cumberland Co., Tenn. *Gen. Nat. Hist.* Coll. Ex.

2682. STRATTON, LORENZO, Grassy Cove, Cumberland Co., Tenn. *Min., Archæo.* Coll. Ex.

2683. STRATTON, N. MARIA, Grassy Cove, Cumberland Co., Tenn. *Ent., Mollusks.* Coll. Ex.

2684. STRECKER, HERMAN, Box 111, Reading, Pa. *Ent.: Lepidoptera from all parts of the World.* Coll. Ex.

2685. STREETS, T. HALE, M. D., P. A. Surgeon U. S. N., Washington, D. C. *Crustacea.*

2686. STRENG, L. H., Grand Rapids, Mich. *Mollusks.* Coll. Ex.

2687. STRONG, Rev. CHAS. H., Savannah, Ga. *Bot., Lepidoptera, Diptera, Arachnida.* Coll.

2688. STRONG, GEO. T., New York City, N. Y. *Micros.*

2689. STROOP, L. J., Graham, Young Co., Tex. *Gen.Biol., Bot., Geol, Palæo., Ent., Herpetol.* Coll.

2690. STROUSE, JOHN, Chestnut Hill, Phila., Pa. *Orn.* Coll. Ex.

2691. STRUMBERG, C. W., Galesburg, Ill. *Orn., Oöl., Ent.* Coll. Ex.
2692. STRUTHERS, R. H., Fort Atkinson, Wis. *Micros., Ent.* Coll. Ex.
2693. STUART, A. P. S., A. M., Lincoln, Neb. *Min.* Coll. Ex.
2694. STUART, E. B., 86 Wabash Ave., Chicago, Ill. *Fungi, Micro-Photog.* Coll. Ex.
2695. STUBBS, CHAS. H., M. D., Wakefield, Pa. *Geol., Min., Archæo.* Coll. Ex.
2696. STUBBS, WM. B., Prof. Ala. Agric. and Mech. Coll., Auburn, Ala.
2697. STULTZ, WM. H., Easton, Pa. *Bot.; Ent.: Lepidoptera, Coleoptera.* Coll. Ex.
2698. SULGROVE, LESLIE, 125 W. South St., Indianapolis, Ind. *Lepidoptera.* Coll. Ex.
2699. SULLIVAN, T., Columbus, O. *Micros.*
2700. SUMMERS, EWING, Galesburg, Ill. *Bot.*
2701. SUMMERS, Rev. R. W., McMinnville, Oregon. *Archæo., Palæo., Con., Radiata.* Coll. Ex.
2702. SUMMERS, Mrs. R. W., McMinnville, Oregon. *Bot.* Herb. Ex.
2703. SUMMERS, T. O., jr., M. D., Nashville, Tenn. *Micros.*
2704. SUMMERS, WM. W., 606 Cottage Grove Ave., Chicago, Ill. *Micros., Ent.* Coll. Ex.
2705. SUMNER, Mrs. HATTIE M., Sherman, Tex.
2706. SUTHERLAND, Rev. N. G., Cape Breton, N. S. *Geol.*
2707. SUTTON, GEORGE, M. D., Aurora, Dearborn Co., Ind. *Geol., Micros., Archæo. of S. E. Indiana.* Coll.
2708. SUTTON, JAMES R., Box 3309, New York City. *Micros.*
2709. SUTTON, WM. T., Worcester, Mass. *Oöl.* Coll. Ex.
2710. SUTTON, WILLIAM, 2514 Sacramento St., San Francisco, Cal. *Land, Fresh Water and Marine Shells.* Coll. Ex.
2711. SWAIN, Miss EMMA, 1354 Eighth Ave., East Oakland, Cal. *Min., Mollusks.* Coll. Ex.
2712. SWAIN, Mrs. J., Fort Dodge, Iowa. *Min.* Coll.
2713. SWALLOW, G. C., Dean Agric. Coll., Columbia, Mo. *Bot., Geol., Zoöl.* Coll. Ex.
2714. SWAN, A. J., 176 William St., New York City. *Micros.*
2715. SWASEY, CHAS. L., M. D., New Bedford, Mass. *Con., Min., Micros.* Coll. Ex.

2716. SWEENY, R. O., 7 W. Third St., St. Paul, Minn. *Ichth.* Coll. Ex.
2717. SWEET, E. T., Silverton, Colo. *Geol.* Coll.
2718. SWEZEY, GOODWIN D., A. M., Beloit, Wis. *Nat. Hist., Geol.* Coll. Ex.
2719. TABER, EDMUND B., Tribune Office, New York City. *Lepidoptera.* Coll.
2720. TAFT, DON CARLOS, Prof. Geol. and Zoöl., Champaign, Ill. *Geol., Zoöl.* Coll. Ex.
2721. TAFT, J., D. D. S., 117 W. 4th St., Cincinnati, O. *Histol.*
2722. TALBOTT, HARRY E., Mt. Auburn, Cincinnati, O. *Orn., Oöl., Palæo.* Coll. Ex.
2723. TANDY, M., Dallas City, Hancock Co., Ill. *Orn., Mam.* Coll.
2724. TASCOTT, FRANK B., 19 & 21 So. Canal St., Chicago, Ill. *Ent., Micros.* Coll. Ex.
2725. TATNALL, EDWARD, Wilmington, Del. *Bot., Ferns.* Coll.
2726. TAYLOR, Prof. A. R., Lincoln, Ill. *Phæn.Bot., Geol., Min., Geog.Distrib., Vert., Ent.* Coll. Ex.
2727. TAYLOR, D. D. S., Minneapolis, Minn. *Micros.*
2728. TAYLOR, F. B., 806 East Scamore St., Des Moines, Iowa. *Elementary Nat. Sci.* Ex.
2729. TAYLOR, Prof. G. WASHINGTON, Cazenovia, Madison Co., N. Y. *Phæn.Bot., Ferns, Mosses, Fungi, Algæ, Geol., Palæo., Geog.Distrib.* Coll.
2730. TAYLOR, Prof. JAMES, New Bedford, Mass. *Ent.: Coleoptera.* Coll. Ex.
2731. TAYLOR, JOHN L., Princeton, N. J. *Phæn.Bot.* Coll.
2732. TAYLOR, JULIUS S., M. D., Kankakee, Ill. *Geol., Palæo.* Coll. Ex.
2733. TAYLOR, THOMAS W., Dep't of Agric., Washington, D. C. *Micros.*
2734. TEBBETTS, CHARLES E., A. B., Ph. B., Prof. Nat. Sci., Penn Coll., Oskaloosa, Iowa. *Invert.Palæo., Bot., Con., Orn.* Coll. Ex.
2735. TEMPLE, J. B., No. Adams, Mass. *Min.* Coll. Ex.
2736. TEPPER, FRED., Box 5433, New York City. *Lepidoptera.* Coll. Ex.
2737. THACHER, CORNELIUS S., B. C. E., Phelps, Ontario Co., N. Y. *Phæn.Bot., Ferns.* Coll. Ex.
2738. THACKER, Dr. G. A., 7th between Race & Elm Sts., Cincinnati, O. *Micros.*

2739. THATCHER, A. R., Haydenville, Mass. *Min.* Coll.
2740. THAXTER, L. L., Boston, Mass. *Mollusca.* Coll.
2741. THAXTER, ROLAND, Newtonville, Mass. *Nocturnal Lepidoptera.* Coll. Ex.
2742. THAYER, E. O., Greensboro, N. C.
2743. THAYER, FRED. A., Sheldonville, Mass. *Geol., Min.* Coll. Ex.
2744. THAYER, HENRY C., Mendota, La Salle Co., Ill. *Gen. Nat. Hist.: Geol., Orn.* Coll. Ex.
2745. THAYER, SAMUEL PROCTOR, No. Adams, Mass. *Bot.*
2746. THOMAS, B. W., 918 Indiana Ave., Chicago, Ill. *Fresh Water Diatomaceæ.* Ex.
2747. THOMAS, CHAS. W., Danforth, cor. of State St., Portland, Me. *Orn.*
2748. THOMAS, CYRUS, Ph.D., State Entomologist, Carbondale, Ill *Ent.: Orthoptera.*
2749. THOMAS, FLAVEL S., M. A., V. S., Hanson, Mass. *Comp. Anat.*
2750. THOMAS, GEORGE C., Racine, Wis. *Photog.; Ent.: Lepidoptera, Coleoptera.* Coll. Ex.
2751. THOMAS, JOHN J., Union Springs, N. Y. *Bot.: Pomology.*
2752. THOMAS, W. B., Taxidermist and Collector in *Nat. Hist.*, Box 337, Fairmount, Grant Co., Ind. Ex.
2753. THOMAS, W. H. B., Mt. Holly, Burlington Co., N. J. *Geol., Invert. Palæo., Anthro., Geog. Distrib.* Coll.
2754. THOMPSON, A. H., D. D. S., Box 854, Topeka, Kans. *Anthropol., Zoöl., Min., Palæo.* Desires to exchange for specimens in Ethnol.
2755. THOMPSON, EDWARD R., M. D., Newburg, Fillmore Co., Minn. *Bot., Micros.* Coll. Ex.
2756. THOMPSON, E. A., 590 Main St., Springfield, Mass. *Bot., Min.* Coll. Ex.
2757. THOMPSON, E. H., Curator Nat. Hist. Soc., Worcester, Mass. *Orn., Ichth., Mam.* Coll. Ex.
2758. THOMPSON, R. H., Troy, N. Y.
2759. THOMPSON, W. W., Orient, L. I., N. Y. *Min., Geol., Archæo.* Coll. Ex.
2760. THOMSON, JOHN H., New Bedford, Mass. *Con.: Terrestrial Pulmonifera.* Coll. Foreign Helices especially desired in exchange.
2761. THOMSON, R. H., Healdsburg, Cal. *Bot., Geol.* Ex.
2762. THOMSON, S. MAY, Healdsburg, Cal.
2763. THOMSON, W. B., New Britain, Conn. *Min.* Coll. Ex.

2764. THORP, A. L., M. D., Marcellus, Mich. *Biol., Emb., Archæo.*
2765. THUM, W., Louisville, Ky. *Micros.*
2766. THURBER, GEO., 245 Broadway, N. Y. City. *Bot.: Grasses.*
2767. THURSTON, JOHN H., Cambridge, Mass. *Micros.* Coll. Ex.
2768. THURSTON, ROBERT H., Prof. Stevens Inst. Technol., Hoboken, N. J. *Engineering.*
2769. TIFFANY, ASA S., 901 W. 5th St., Davenport, Iowa. *Geol., Palæo., Ethnol.* Coll. Ex.
2770. TIFFANY, Prof. L MCLANE, M. D., 31 Cathedral St., Baltimore, Md. *Micros.*
2771. TILDEN, A. O., Pawtucket, R. I. *Micros.*
2772. TILLOTSON, H. Z., C. E., Marshall, Mich. *Orn.* Coll.
2773. TINGLEY, JOSEPH, Prof. Nat. Sci., Greencastle, Ind.
2774. TINKHAM, CHARLES, Quechee, Windsor Co., Vt. *Min., Oöl., Ent.* Coll. Ex.
2775. TODD, DAVID H., Kansas City, Mo. *Fossils.* Coll. Ex.
2776. TODD, JAMES E., Prof. Nat. Sci., Tabor Coll., Tabor, Iowa. *Prac.Ent., Geol., Malacol.* Coll. Ex.
2777. TOLLES, ROBERT B., 40 Hanover St., Boston, Mass. *Manufacturer of Optical Instruments.*
2778. TONER, J. M., M. D., Washington, D. C. *Anthropol.*
2779. TOOKER, WM. WALLACE, Sag Harbor, N. Y. *Ethnol., Archæo.* Coll.
2780. TORR, J. M, Oakalla, Putnam Co., Ind. *Geol., Min., Archæo.* Coll. Ex.
2781. TOWNSEND, ALBERT C., Springfield, Mass. *Min., Geol.*
2782. TOWNSEND, CHAS. H., Beatty, Westmoreland Co., Pa. *Orn., Oöl.* Coll. Ex.
2783. TOWNSHEND, Prof. N. S., Columbus, O. *Bot.* Coll.
2784. TOZER, HENRY, Box 1774, Battle Creek, Mich. *Geol.*
2785. TRABANDT, C., cor. Havana & Liberal Sts., New Orleans, La. *Coleoptera.* Coll. Ex.
2786. TRACY, CHARLES O., Taftsville, Windsor Co., Vt. *Land and Fresh Water Shells, Oöl., Min.* Coll. Ex.
2787. TRACY, CYRUS M., Lynn, Mass. *Bot., Min.* Coll.
2788. TRACY, S. M., M. S., State University, Boone Co., Mo. *Bot., Ent.* Coll. Ex.

2789. TRASK, Mrs. CAROLINE, Diamond Hill, R. I. *Geol.*, *Min.* Coll. Ex.

2790. TRASK, P. H., San Diego, Cal. *Coleoptera.*

2791. TREADWELL, HOWARD, M. D., Ph. D., Microscopist, 735 Broadway, Albany, N. Y. *Histol.*, *Anthropol.* Coll. Ex.

2792. TREGANZA, J. A., Hazel Green, Wis. *Tax.*, *Min.* Coll. Ex.

2793. TREAT, Mrs. MARY, Vineland, N. J. *Bot.*, *Ent.*, *Micros.*

2794. TREHERNE, H. SACKVILLE, C. E., U. S. Engineer Corps, St. Paul, Minn. *Lepidoptera, Coleoptera.*

2795. TRELEASE, W., Ithaca, N. Y. *Phæn.Bot.*, *Ferns.* Coll. Ex.

2796. TRIPP, HENRY O., 359 High St., Providence, R. I. *Min.*

2797. TRIPPE, T. MARTIN, Howardsville, San Juan Co., Colo. *Orn.*, *Mam.*

2798. TROMBLEY, JEROME, Petersburg, Mich. *Local Bot.*, *Orn.*, *Oöl.*, *Ichth.*, *Con.* Coll. Ex.

2799. TROTTER, SPENCER, 1621 Filbert St., Phila, Pa. *Orn.* Coll. Ex.

2800. TROUSLOT, ROLLIN B., Taxidermist, Sandwich, Ill. *Orn.*, *Lepidoptera*, *Coleoptera.* Coll. Ex. in Orn. and Lepidoptera.

2801. TROWBRIDGE, DAVID, A. M., Waterburgh, N. Y. *Geol.* Coll.

2802. TROWBRIDGE, SAMUEL H., A. M., Prof. Pritchett Inst., Glasgow, Howard Co., Mo. *Geol.*, *Nat. Hist.* Coll. Ex.

2803. TROXLER, H. A., 121 E. Market St., Louisville, Ky. *Coleoptera*, *Lepidoptera.* Coll.

2804. TRYON, A. WALTER, M. D., Lockport, N. Y. *Bot.*, *Palæo.*, *Geol.*, *Min.*, *Mollusks.* Coll. Ex.

2805. TRYON, GEO. W., jr., Conservator Conchological Section, Acad. Nat. Sci., Phila., Pa. *Mollusks.*

2806. TUCKERMAN, Prof. EDW., Amherst Coll., Amherst, Mass.

2807. TUCKERMAN, Prof. S. B., Austinburg, O. *Micros.*

2808. TURNER, HENRY W., Ithaca, N. Y. *Gen.Biol.*, *Amphibians, Ent.* Coll.

2809. TURNER, LUCIEN M. (For the next three years in Alaska), Mt. Carmel, Ill. *Ethnol.*, *Archæo.*, *Philol.*, *Orn.* Coll.

2810. TURNER, R. S., M. D., Fort George, Duval Co., Fla. *Micros.* Coll. Ex.

2811. TURNURE, MILTON, Closter, N. J. *Micros., Histol. of Vert.* Coll. Ex.

2812. TUTHILL, J. B. T., Santa Cruz, Cal. *Micros., Algæ. Diatoms.* Ex.

2813. TUTTLE, ALBERT H., Prof. of Zoöl. and Physiol., State University, cor. Broad and Third Sts., Columbus, O. *Micros., Gen. Biol., Histol., Myriopoda, Protozoa.*

2814. TUTWILER, JULIA H., Green Springs, Hale Co., Ala. *Bot.* Coll. Ex.

2815. TWEDDLE, G., Box 101, Albany, New York. *Bot.: Horticulture; Palæo., Ent.* Coll.

2816. TWEDDLE, JOHN B., Box 101, Albany, N. Y. *Bot.: Horticulture; Palæo., Ent.* Coll. Ex.

2817. TWEEDY, FRANK, C. E., Plainfield, N. J. *Phæn. Bot., Ferns.* Coll. Ex.

2818. TYLER, FREDERICK A., Rome, Oneida Co., N. Y. *Min.* Coll.

2819. TYSON, JAMES, M. D., 1506 Spruce St., Phila., Pa. *Gen. Biol., Medical Micros., Patholog. Histol.*

2820. UHLER, PHILIP R., Pres. Maryland Acad. Sci., Baltimore, Md. *Hemiptera, Neuroptera, Crayfish.* Coll. Ex.

2821. ULKE, HENRY, 1111 Pennsylvania Ave., Washington, D. C. *Coleoptera.* Coll. Ex.

2822. ULRICH, E. O., 108 Broadway, Cincinnati, O. *Palæo.: Invert.: Zoophyta, Bryozoa, Radiates.* Coll. Ex.

2823. UNDERHILL, EDWARD B., Hallocks Mills, Westchester Co., N. Y. *Min., Palæo.* Spec. — *Agr.* Coll. Ex.

2824. UNDERWOOD, LUCIEN M., Syracuse, N. Y. *Bot.: Ferns; Coleoptera, Lepidoptera.* Coll. Ex.

2825. UNDERWOOD, W. O., Newton, Mass. *Orn., Oöl.* Coll.

2826. UPHAM, WARREN, Nashua, N. H. *Geol.* (*Glacial and Recent*).

2827. UPSON, HENRY S., Akron, O. *Lepidoptera.* Coll. Ex.

2828. UPSON, J. B., Rockford, Ill. *Crypt. Bot.: living Ferns. Horticulture, Palæo.* Coll. Ex.

2829. VAIL, BEN, jr., Henryville, Clarke Co., Ind. *Geol., Min.* Coll. Ex.

2830. VAIL, EMILY A., La Porte, Ind. *Ent., Oöl.* Coll. Ex.

2831. VALIANT, WM. S., Consulting Naturalist, in rear of 59 Liberty St., Rome, Oneida Co., N. Y. *Min., Geol., Archæo.* Coll. Ex.

2832. VALLANDINGHAM, GEO. W., 420 Baymiller St., Cincinnati, O. *Palæo.* Coll.

2833. VAN BRUNT, C., Poughkeepsie, N. Y. *Fungi, Algæ, Desmids, Diatoms, Micros.*

2834. VAN CLEEF, Miss SARAH M., Tyre, N. Y. *Ent., Lepidoptera.*

2835. VAN DENBURG, M. W., A. M., Fort Edward, N. Y. *Bot., Orn.* Coll. Ex.

2836. VAN DER WEYDE, P. H., M. D., 236 Duffield St., Brooklyn, N. Y. *Diatoms, Chem. Geol., Crystallog., Micros., Photog., Infusoria.* Coll.

2837. VAN DUSER, JESSE, Waynesville, O. *Palæo.*

2838. VAN DUZEE, WM. S., Lancaster, Erie Co., N. Y. *Gen. Nat. Sci.* Coll. Ex.

2839. VAN DUYN, Prof. JOHN, M. D., Syracuse, N. Y. *Micros.*

2840. VAN DYCK, Prof. F. C., Rutger's Coll., New Brunswick, N. J. *Micros.*

2841. VAN HORNE, W C., 48 Park Ave., Chicago, Ill. *Palæo.*

2842. VAN SLYKE, C. B., 1050 Main St., Dubuque, Iowa. *Phæn. Bot. Geol., Orn.*

2843. VAN SLYKE, Dr. E., 83 Bassett St., Albany, N. Y. *Micros.*

2844. VAN VLECK, BALFOUR H., Bost. Soc. Nat. Hist., Boston, Mass. *Comp. Anat. of Vert.* Coll.

2845. VAN WINKLE, A. S., Trenton, Clinton Co., Ill. *Prac. Ent., Bot., Emb., Bibliog., Geog. Distrib.* Coll. Ex.

2846. VARDON, MAURICE M., Box 219, Toronto, Can. *Ent.* Coll.

2847. VASEY, GEORGE, M. D., Dep't of Agric., Washington, D. C. *Bot.: Gramineæ.*

2848. VAUPEL, ERNST H., 25 Jones St., Cincinnati, O. *Palæo., Con.* Coll. Ex.

2849. VAUX, WM. S., Vice Pres. Acad. Nat. Sci., 1702 Arch St., Phila., Pa. *Min., Archæo.* Coll.

2850. VEATCH, CHAS., Keytesville, Chariton Co., Mo. *Min.: Pseudomorphs.* Coll. Ex.

2851. VEATCH, FRED, Keytesville, Mo. *Coleoptera.* Coll. Ex.

2852. VEAZEY, DANIEL B., Hematite, Jefferson Co., Mo. *Invert. Palæo.* Coll. Ex.

2853. VEITCH, ARCHIBALD, New Haven, Conn. *Bot.*

2854. VELIE, Dr. J. W., Sec. Acad. Sci., 263 Wabash Ave., Chicago, Ill. *Mam., Orn., Mollusca.* Coll.

2855. VENNOR, HENRY G., F. G. S., Geolog. Surv. of Can., Montreal, Can. *Orn., Geol., Min., Geog. Distrib.* Coll.

2856. VERRILL, ADDISON E., Prof. of Zoöl., Yale College, New Haven, Conn. *Gen. Biol., Geol., Geog. Distrib., Invert. Emb., Orn., Worms, Mollusks, Radiates, Sponges.*

2857. VICKERY, Miss HELEN P., Weymouth, Mass. *Micros.*

2858. VIELE, E. L., 37 W. 18th St., New York City. *Bot.: Horticulture, Min., Micros., Protozoa, Infusoria.* Coll. Ex.

2859. VOGDES, A. W., Lieut. 5th Artillery, Charleston, S. C. *Geol., Palæo.* Will exchange fossils for good specimens of trilobites.

2860. VOLKERT, JULIUS H., Benton, Mono Co., Cal. *Min.* Coll. Ex.

2861. VOORHEES, Miss BELLE, Daggett's Mills, Tioga Co., Pa. *Geol., Vert., Mam., Orn., Reptiles, Crustacea, Worms, Radiates.* Coll.

2862. VOORHEES, CHAS. H., M. D., New Brunswick, N. J. *Nat. Hist., Palæo.*

2863. VOORHEES, HERMAN, Syracuse, N. Y. *Micros.*

2864. VOORHEES, PAUL, Exeter, N. H. *Micros., Coleoptera.*

2865. VORCE, C. M., 164 Lake St., Cleveland, O. *Ent., Micros.* Coll. Ex.

2866. WACHSMUTH, CHAS., Burlington, Iowa. *Palæo.* Coll. Ex. for Crinoids only.

2867. WADE, JOS. M., Rockville, Conn. *Orn.* Coll. Ex.

2868. WADGYMAR, ARTHUR, M. D., Castroville, Medina Co., Tex. *Bot., Micros.; Gen. Ent.: Coleoptera.* Coll. Ex.

2869. WADSWORTH, FRANCIS L., M. D., 229 Ontario St., Chicago, Ill. *Micros.*

2870. WADSWORTH, FRANK, Keene, N. H. *Bot., Orn.* Coll.

2871. WADSWORTH, M. E., Ass't, Mus. Comp. Zoöl., Cambridge, Mass. *Petrography.* Coll.

2872. WADSWORTH, SAM'L, Keene, N. H. *Orn., Micros.,* Coll.

2873. WADSWORTH, S. B., Sup't of Schools, Oregon, Ogle Co., Ill. *Geol., Orn., Histolog. Zoöl.* Coll. Ex.

2874. WALBRIDGE, O. D., Member Ottawa Acad. Sci., Marseilles, La Salle Co., Ill. *Geol.*, *Archæo.*, *Min.* Coll. Ex.

2875. WALCOTT, CHAS. D., State Mus. Nat. Hist., Albany, N. Y. *Geol.* Coll. Ex.

2876. WALDO, C. A., Middletown, Conn. *Palæo.*, *Min.* Coll. Ex. minerals for minerals and fossils.

2877. WALES, WILLIAM, Fort Lee, N. J. *Micros.*

2878. WALKER, BRYANT, 18 Moffat Block, Detroit, Mich. *Con.* Coll. Ex.

2879. WALKER, CHAS. A., 42 Court St., Boston, Mass. *Nat. Hist. Draughtsman.*

2880. WALKER, G. S., M. D., 2809 Washington Ave., St. Louis, Mo. *Gen. Nat. Hist.* Coll.

2881. WALKER, JOSEPH B., Pres. Amer. Indust. Coll., 231 11th St., Louisville, Ky. *Geol.* Coll. Ex.

2882. WALKER, J. R., 154 Canal St., New Orleans, La. *Geol.*, *Physiol.*

2883. WALKER, N. B., Lotos Club, Fifth Ave., cor. 21st St., New York City. *Min.*, *Metall.*, *Mining.* Coll.

2884. WALKER, Mrs. NATHAN B., New York City. *Zoöl.*

2885. WALL, JOHN L., 338 Sixth Ave., N. Y. City. *Bot.*, *Micros.* Coll.

2886. WALLACE, EDWIN R., 46 Burnet St., Syracuse, N. Y. *Geol.*, *Min.*, *Bot.*, *Orn.* Coll.

2887. WALLACE, JOHN, 17 No. William St., N. Y. City. *Mam.*, *Orn.*, *Reptiles*, *Ichth.* Coll. Ex.

2888. WALLER, ELWYN, Ph. D., Sch. of Mines, Columbia Coll., N. Y. City. *Crypt. Bot.: Ferns.* Ex.

2889. WALLING, HENRY F., 102 Chauncy St., Boston, Mass. *Geol.*, *Min.*

2890. WALMSLEY, WM. H., 921 Chestnut St., Phila., Pa. *Micros.*

2891. WALSH, Dr. J. F., 318 So. 15th St., Phila., Pa. *Micros.*

2892. WALTHEW, FRANK A., Box 992, Galveston, Texas. *Orn.*

2893. WALTON, Miss ALICE B., Muscatine, Iowa. *Ent.: Lepidoptera.* Coll.

2894. WALTON, Miss LILLIE P., Muscatine, Iowa. *Ent.: Coleoptera; Bot.* Coll.

2895. WALWORTH, A. W., Collamer, Cuyahoga Co., O. *Oöl.*, *Tax.* Coll. Ex.

2896. WARD, GEO. J., M. D., St. Clair, Mich. *Biol.*, *Ethnol.* Coll. Ex.

2897. WARD, HENRY A., A. M., F. G. S., F. Z. S., Rochester, N. Y. *Min., Geol., Zoöl.* Coll.

2898. WARD, JAMES W., Grosvenor Library, Buffalo, N. Y. *Bot., Micros., Physiol.* Coll.

2899. WARD, LESTER F., A. M., 1464 Rhode Island Ave., Washington, D. C. *Bot., Gen. Biol.* Coll. Ex.

2900. WARD, R. H., M. D.; Prof. of Bot., Rensselaer Polytech. Inst., 53 Fourth St., Troy, N. Y. *Bot., Gen. Biol., Micros.* Coll.

2901. WARD, W. H., Editor "Independent," N. Y. City. *Bot.*

2902. WARDER, Dr. JNO. A., Pres. Am. Forestry Assoc., North Bend, Hamilton Co., O. *Forest Botany, Agricultural Botany.*

2903. WARNE, H. A., Oneida, N. Y. *Crypt. Bot.: Fungi; Microscopy.* Coll. Ex.

2904. WARNER, Miss ANNA P., Waverly, Tioga Co., N. Y. *Bot.: Phænogamia.* Coll. Ex.

2905. WARNER, E. B., New York City. *Micros.*

2906. WARNER, H. C., Clermont, Fayette Co., Iowa. *Zoöl., Geol., Ent., Con.* Coll. Ex.

2907. WARREN, B. HARRY, Box 148, West Chester, Chester Co., Pa. *Orn.* Coll. Ex.

2908. WARREN, GOUVERNEUR K., Prof. Military and Civil Engineering, Newport, R. I. *Physical Geography and Geology.*

2909. WARREN, H. M., jr., Box 278, West Newton, Mass. *Orn.* Coll. Ex.

2910. WARREN, JESSE, Box 2604, Phila., Pa. *Orn., Oöl.* Coll. Ex.

2911. WARREN, J. EDWARD, 135 Mayberry Ave., Detroit, Mich. *Ent.: Lepidoptera.* Coll. Ex.

2912. WARRING, CHAS. B., Ph. D., Poughkeepsie, N. Y. *Cosmology.*

2913. WASHBURN, F. L., Needham, Mass. *Orn.* Coll. Ex.

2914. WASHBURN, R. R., M. D., Waldron, Ind. *Geol.* Coll. Ex.

2915. WATERHOUSE, A., M. D., Jamestown, Chatauqua Co., N. Y. *Nat. Hist., Micros.*

2916. WATERMAN, JOHN R., Box 300, Woonsocket, R. I. *Geol., Min., Palæo.* Coll. Ex. Collections or single specimens exchanged.

2917. WATERMAN, J. F., Plymouth, Vt. *Geol., Min.* Coll. Ex.

2918. WATERMAN, SILAS C., Albany, N. Y. *Ent.: Lepidoptera.* Coll. Ex.

2919. WATERMAN, Dr. S., 103 W. 49th St., New York City. *Micros.*

2920. WATERMAN, THOMAS, A. M., M. D., 146 Boylston St., Boston, Mass. *Comp. Anat.*

2921. WATERMAN, WM. H., Box 236, New Bedford, Mass. *Geol., Min.* Coll. Ex.

2922. WATSON, LOUIS, M. D., Ellis, Kans. *Bot., Orn.*

2923. WATSON, SERENO, Curator Harv. Univ. Herb., Cambridge, Mass. *Bot.*

2924. WATT, DAVID A. P., Montreal, Can. *Bot.: Ferns.* Coll. Ex.

2925. WATTERS, H., Ottawa, Can. *Bot., Micros.*

2926. WAYNE, Prof. EDWARD S., M. D., Cincinnati, O. *Min.* Coll. Ex.

2927. WEBB, BENJ., jr., Salem, Mass. *Micros.*

2928. WEBB, HUGH I., Richmond, Ind. *Palæo., Geol.* Coll. Ex.

2929. WEBBER, FRED W., Cambridgeport, Mass. *Oöl.* Coll. Ex.

2930. WEBSTER, FRANK B., Pawtucket, R. I. *Orn.* Coll. Ex.

2931. WEBSTER, F. M., Waterman, De Kalb Co., Ill. *Ent.: Coleoptera of N. A.* Coll. Ex.

2932. WEBSTER, Prof. H. E., Union Coll., Schenectady, N. Y. *Annelida, Chætopoda.* Coll. Ex.

2933. WEBSTER, Prof. NATHAN B., 45 Charlotte St., Norfolk, Va. *Bot., Min., Geol.* Coll. Ex.

2934. WEISSE, Prof. FANEUIL D., Medical Department, Univ. of the City of N. Y., 410 E. 26th St., New York City. *Anthro.* Coll. Ex.

2935. WEIST, J. R., M. D., Richmond, Ind. *Comp. Osteol.* Coll.

2936. WELD, M. W., M. D., 23 Worcester St., Boston, Mass. *Horticulture.*

2937. WELLES, GEO. P., 117 So. Clark St., Chicago, Ill. *Coleoptera.* Coll. Ex.

2938. WELLINGTON, C. W. W., Hyde Park, Mass. *Geol., Min., Palæo.* Coll. Ex.

2939. WELLS, M., Indianapolis, Ind. *Micros.*

2940. WELLS, SAMUEL, 31 Pemberton Square, Boston, Mass. *Micros., Diatomaceæ; Photog.*

2941. WELLS, WM. LEHMAN, M. D. 216 So. 9th St., Phila., Pa. *Anthropol.*

2942. WELTY, H. G., Supt. of Schools, Marion, O. *Determinative Mineralogy.* Coll.
2943. WENDELL, OLIVER C., Dover, N. H. *Micros.*
2944. WENZEL, H. W., 710 McKean St., Phila., Pa. *Ent.: Coleoptera of U. S.* Coll. Ex.
2945. WEST, Prof. CHAS. E., Brooklyn, N. Y. *Micros.*
2946. WEST, FRANK E., Winchester, Mass. *Phæn.Bot., Ferns.*
2947. WEST, J. H., Closter City, Bergen Co., N. J. *Phæn. Bot., Ferns, Crystallog., Orn.* Coll. Ex.
2948. WEST, PAUL, Minneapolis, Minn. *Orn.* Coll. Ex.
2949. WESTCOTT, O. S., Racine, Wis. *Ent.: Lepidoptera, Coleoptera.* Coll. Ex.
2950. WESTERMANN, B. & Co., 524 Broadway, N. Y. *Micros.*
2951. WESTON, EDW. B., A. M., M. D., Highland Park, Lake Co., Ill. *Bot.* Coll.
2952. WESTON, EUGENE, Canon City, Fremont Co., Colo. *Min., Fossils, Geol.* Coll. Ex.
2953. WETHERBEE, I. J., D. D. S., Boston, Mass. *Micros.*
2954. WETHERBY, Prof. A. G., Cincinnati, O. *Geol., Ent., Con.* Coll. Duplicate Fossils of Cin. Group, L. & F. W. Shells of Southern States, Noctuidæ and Coleoptera for exchange. Desiderata. — L. & F. W. Shells, Fossils and Insects.
2955. WHARTON, JOSEPH, Box 2786, Phila., Pa. *Metall.*
2956. WHEATLAND, HENRY, M. D., Pres. Essex Inst., Salem, Mass. *Comp.Anat.*
2957. WHEATLEY, CHAS. M., A. M., Phœnixville, Chester Co., Pa. *Fresh Water Shells, Mesozoic Fossils, Min.* Coll. Ex.
2958. WHEATON, J. M., M. D., Columbus, O. *Orn., Arachnida, Myriopoda, Mollusks.* Coll. Ex.
2959. WHEELER, CHAS. F., Hubbardston, Mich. *Bot.: Cyperaceæ, Gramineæ.* Coll. Ex.
2960. WHEELER, C. GILBERT, Univ. of Chicago, Chicago, Ill. *Geol., Min.* Coll. Ex.
2961. WHEELER, ERASTUS S., Berlin, Mass. *Phæn.Bot., Mosses, Ferns, Horticulture.* Coll. Ex.
2962. WHEELER, Lieut. GEO., Corps of Engineers, U. S. Geographical Surveys, West of 100th Meridian, L. B. 93, Washington, D. C.
2963. WHEELER, H. A., 32 Bromfield St., Boston, Mass. *Orn.* Coll.

2964. WHEELER, IVAN, Grinnell, Iowa. *Orn.*, *Oöl.* Coll. Ex.

2965. WHEELER, ORLANDO B., Ass't Engineer U. S. Lake Survey, 194 Clifford St., Detroit, Mich. *Bot.* Coll.

2966. WHEELER, W. B., M. D., Boonsboro, Washington Co., Md.

2967. WHEELOCK, GEO. A., Keene, N. H. *Crypt.Bot.*, *Lithol.*, *Osteol.*, *Mollusks.* Coll.

2968. WHEILDON, WM. W., Concord, Mass. *Con.*, *Horticulture.*

2969. WHERRELL, JOHN, Leavenworth, Kans. *Bot.* Coll.

2970. WHIPPLE, ELLIOTT, Mishawaka, St. Joseph Co., Ind. *Zoöl.* Coll. Ex.

2971. WHIPPLE, H. L., 517 Leavenworth St., San Francisco, Cal. *Coleoptera.*

2972. WHIPPLE, JENNIE MAY, Box 1143, Norwich, Conn. *Orn.*, *Oöl.* Coll. Ex.

2973. WHIPPLE, WARREN A., Diamond Hill, R. I. *Geol.*, *Min.* Coll. Ex.

2974. WHITE, C. A., M. D., U. S. Geolog. Surv., Washington, D. C. *Geol.*, *Palæo.*

2975. WHITE, C. E., Box 35, Holyoke, Mass. *Lepidoptera.*

2976. WHITE, I. C., Prof. of Nat. Hist., Univ. of W. Va., Morgantown, W. Va., and Ass't Geologist Pa. Geolog. Surv. *Phæn.Bot.*, *Ferns*, *Invert.Palæo.*, *Geol.* Coll. Ex.

2977. WHITE, Dr. J. C., 10 Park Square, Boston, Mass. *Phæn.Bot.* Coll.

2978. WHITE, Col. WM., Ottawa, Can. *Bot.*

2979. WHITEAVES, J. F., Geolog. Surv. of Canada, Montreal, Can. *Invert.Palæo.*, *Geog.Distrib.*, *Mollusks*, *Radiates*, *Sponges*, *Protozoa.* Coll.

2980. WHITEHARD, G. J., 149 Broadway, N. Y. City. *Micros.*

2981. WHITESIDE, ALBERT, South Cambridge, Washington Co., N. Y. *Bot.* Coll.

2982. WHITESIDES, Miss JENNIE E., Harmonsburg, Crawford Co., Pa. *Bot.* Coll. Ex.

2983. WHITFIELD, R. P., Amer. Mus. Nat. Hist., cor. 77th St. & 8th Ave., N. Y. City. *Geol.*, *Palæo.*

2984. WHITLOCK, CHAS. M., Orange, Essex Co., N. J. *Min.*, *Geol.* Coll. Ex.

2985. WHITMAN, ALLEN, St. Paul, Minn. *Philol.*

2986. WHITMAN, G. P., Rockport, Mass. *Orn.*, *Oöl.*

2987. WHITMAN, PHILIP, Sing Sing, N. Y. *Lepidoptera, Coleoptera, Orn.*

2988. WHITNEY, CHAS. B., Worcester, Mass. *Min.*

2989. WHITNEY, C. P., Milford, N. H. *N. A. Lepidoptera and Tabanidæ.* Coll. Ex.

2990. WHITNEY, Prof. J. D., Cambridge, Mass. *Geol.* Coll.

2991. WHITNEY, SOLON F., Watertown, Mass. *Min., Lepidoptera.* Coll.

2992. WHORF, EDWARD H., 350 Atlantic Ave., Boston, Mass. *Ferns.* Coll. Ex.

2993. WHYTE, ROB'T B., 73 Rideau St., Ottawa, Can. *Bot.* Coll. Ex.

2994. WIBBE, Rev. J. HERMANN, Ph. D., Oswego, N. Y. *Bot.* Coll. Exchange in Native and Foreign plants.

2995. WIDEMIRE, SAMUEL, Grampian Hills, Clearfield Co., Pa. *Geol.*

2996. WIDMANN, OTTO, 4024 Carondelet Ave., St. Louis, Mo. *Orn.* Coll.

2997. WIER, DANIEL BYRN, Horticulturist, Lacon, Marshall Co., Ill. *Ent., Zoöl., Orn., Geol., Ichth., Crypt. Bot.*

2998. WIGGIN, FRED S., Maysville Centre, Aroostook Co., Me. *Phæn. Bot.* Coll. Ex.

2999. WIGHT, SIDNEY B., Detroit, Mich. *Min.* Coll. Ex.

3000. WIGHT, WILLIAM H., Taxidermist, Framingham, Mass. *Orn., Zoöl.* Coll. Ex.

3001. WILBER, G. M., 140 W. 20th St., New York City. *Phæn. Bot.; Min.: Lithol.* Coll. Ex.

3002. WILBER, H. D., Plainville, Conn. *Min.* Coll. Ex.

3003. WILD, GEO. A., Curator and Taxidermist (State Univ.), Champaign, Ill. *Comp. Zoöl.* Coll. Ex.

3004. WILDBERGER, Maj. R. H., Prof. of Nat. Sci., Ky. Military Inst., Farmdale, Ky. *Phæn. Bot., Ferns, Invert. Palæo., Geol., Min.* Coll. Ex.

3005. WILDER, BURT G., M. D., Prof. Physiol., Comp. Anat. and Zool., Cornell Univ., Ithaca, N. Y. Will exchange Amphioxus and living or alcoholic Menebranchus for brains and young of Vertebrates.

3006. WILEY, HARVEY W., Lafayette, Ind. *Min.*

3007. WILKINS, D. F. H., A. B., Albert Coll., Belleville, Ontario, Can. *Geol., Lithol.*

3008. WILKINS, FRANK (with John Rowell), San Francisco, Cal. *Micros.*

3009. WILKINSON, E., jr., Taxidermist, Mansfield, Richland Co., O. *Nat. Sci.* Spec. — *Ent.* Coll. Ex.
3010. WILKINSON, R., Toronto, Can. *Ent.: Lepidoptera.*
3011. WILLARD, ARTHUR W., Box 1238, Boston, Mass. *Lepidoptera, Orn.*
3012. WILLARD, SAM W., West De Pere, Brown Co., Wis. *Orn.* Coll. Ex.
3013. WILLARD, S. L., 27 Oneida St., Utica, N. Y. *Orn., Oöl.* Coll.
3014. WILLCOX, GEO. W., 14 E. 3rd St., Cincinnati, O. *Archæo., Palæo., Min.* Coll. Ex.
3015. WILLCOX, JOSEPH, Acad. Nat. Sci., Phila., Pa. *Min.* Coll.
3016. WILLET, Prof. JOSEPH E., Mercer Univ., Macon, Ga. *Geol., Ent.*
3017. WILLETTS, JOSEPH C., Skaneateles, Onondaga Co., N. Y. *Ichth.* Coll. Ex.
3018. WILLEY, HENRY, New Bedford, Mass. *Bot.: Lichens.* Coll. Ex.
3019. WILLIAMS, A. M., M. D., Meadville, Pa. *Mam., Orn.* Coll. Ex.
3020. WILLIAMS, CHAS. H., Winchester Centre, Conn. *Orn., Oöl.* Coll. Ex.
3021. WILLIAMS, Rev. C. FOSTER, Ashwood, Maury Co., Tenn. *Palæo., Archæo.* Coll. Ex.
3022. WILLIAMS, E. HOWARD, Chestnut Hill, Phila., Pa. *Min., Micros., Orn., Ent., Bot.* Coll.
3023. WILLIAMS, F. H., M. E., Wyandotte, Mich. *Metallurgy.*
3024. WILLIAMS, J. L., Fountaindale, Winnebago Co., Ill. *Bot.*
3025. WILLIAMS, K. A., jr., 15 Broadway, N. Y. City. *Micros.*
3026. WILLIAMS, MILO G., Prof. Urbana Univ., Urbana, Champaign Co., O. *Bot., Geol., Palæo.* Coll. Ex.
3027. WILLIAMS, Prof. S. G., Ph. D., 428 Case Ave., Cleveland, O. *Bot.: Ferns, Palæo., Geol., Mollusks.* Coll. Ex.
3028. WILLIAMS, WM. H., Reading, Pa. *Min.* Coll. Ex.
3029. WILLIAMS, W. H., Lakeville, Conn.
3030. WILLIAMSON, CHAS. E., Hooker Station, Fairfield Co., O. *Geol., Min., Archæo., Palæo.* Coll. Ex.
3031. WILLIAMSON, JAMES M., Morrison, Whiteside Co., Ill. *Palæo., Geol., Min., Crustacea, Archæo., Orn., Con.* Coll. Ex.

3032. WILLIAMSON, JOHN, 63 Market St., Louisville, Ky. *Bot.: Ferns.*

3033. WILLIAMSON, W., Box 649, Toronto, Can. *Ent.: Lepidoptera.* Coll. Ex.

3034. WILLIAMSON, Dr. W., New Brunswick, N. J. *Micros.*

3035. WILLIS, Dr. L. M., Charlestown, Mass. *Micros.*

3036. WILLIS, MERRITT, Westchester, N. Y. (P. O. address, West Farms, New York City.) *Archæo.* Coll. Ex.

3037. WILLIS, OLIVER R., Ph. D., White Plains, N. Y. *Phæn. Bot., Geol.* Coll. Ex.

3038. WILLISTON, S. W., M. A., 92 High St., New Haven, Conn. *Vert. Palæo., Orn., Coleoptera, Diptera.* Coll. Ex.

3039. WILMOT, W. H., M. D., Lawn Ridge, Ill. *Ferns.* Will exchange roots of *Cypripedium candidum* for mounted or unmounted specimens.

3040. WILSON, A. D., U. S. Geolog. Surv., Washington, D. C.

3041. WILSON, EDW. B., New Haven, Conn. *Marine Invertebrates.*

3042. WILSON, HAROLD B., 130 Broadway, Cincinnati, O. *Coleoptera, and Microscopic Anatomy of Insects.* Coll. Ex.

3043. WILSON, Dr. H. P. C., Baltimore, Md. *Micros.*

3044. WILSON, JAMES, Arkansas City, Kans. *Bot.: Ferns.*

3045. WILSON, JOHN, 707 Superior St., Toledo, O. *Bot., Micros., Ent.*

3046. WILSON, JOHN X., 1133 Main St., Peoria, Ill. *Hymenoptera: Aphidæ.*

3047. WILSON, Miss MARY, Niagara St., Buffalo, N. Y. *Micros.*

3048. WILSON, SAM'L T., Athens, Tenn. *Min.* Coll. Ex.

3049. WILSON, THOS. J., M. D., Box 81, Auburn, N. Y. *Orn., Oöl.* Coll. Ex.

3050. WILSON, W. P., 21 North Ave, Cambridge, Mass. *Phæn. Bot.*

3051. WILT, CHAS., 1306 South St., Phila., Pa. *Lepidoptera, Coleoptera.* Coll. Ex.

3052. WINCH, MARTIN, Portland, Oregon. *Orn.* Coll. Ex.

3053. WINCHELL, Prof. ALEXANDER, Ann Arbor, Mich. *Phæn. Bot., Ferns, Diatoms, Palæo., Geol., Vert. Emb., Ethnol., Osteol.* Coll. Ex.

3054. WINCHELL, N. H., State Geologist, State Univ., Minneapolis, Minn. *Geol., Min., Microscopic Lithology.* Coll. Ex.

3055. WING, Prof. CHAS. H., Cornell Univ., Ithaca, N. Y. *Micros.*

3056. WINSLOW, J. C., Danville, Ill. *Geol., Min.* Coll. Ex.

3057. WINSLOW, J. E., Virgil, Cortland Co., N. Y. *Bot., Min.*

3058. WINSLOW, R. K., Cleveland, O. *Orn.* Coll. Ex.

3059. WINTERS, J. K. P., Beaver, Winona Co., Minn.

3060. WITHINGHAM, J. P., Box 2139, New York City. *Micros.*

3061. WITTER, Prof. F. M., Muscatine, Iowa. *Lepidoptera, Mollusks.* Coll. Ex.

3062. WOLF, JOHN, Canton, Ill. *Phæn.Bot.; Crypt.Bot.: Ferns, Mosses, Fungi; Invert.Palæo.* Coll. Ex.

3063. WOLLE, A., jr., Baltimore, Md. *Crypt.Bot.: Ferns: Palæo., Orn., Ichth.* Coll. Ex.

3064. WOLLE, FRANCIS, Bethlehem, Pa. *F. W. Algæ.* Coll. Ex.

3065. WOOD, Prof. ALPHONSO, West Farms Station, N. Y. City. *Phæn.Bot.: Crypt.Bot.; Ferns, Mosses.* Coll.

3066. WOOD, AUGUSTUS H., Painted Post, N. Y. *Orn., Mam., Tax.* Coll. Ex.

3067. WOOD, CHARLES H., Augusta, Hancock Co., Ill. *Geol., Min.* Coll. Ex.

3068. WOOD, CHARLES, Box 505, Grand Lodge, Mich. *Micros.*

3069. WOOD, Prof. EDWARD S., M. D., Harvard Univ., 14 Chauncy St., Cambridge, Mass. *Micros.*

3070. WOOD, HORATIO C., M. D., Phila., Pa. *Bot., Biol.*

3071. WOOD, NELSON R., Clyde, N. Y. *Orn.* Ex.

3072. WOOD, P. B., Owing's Mills, Baltimore Co., Md. *Orn., Oöl.* Coll. Ex.

3073. WOOD, WILLIAM, M. D., East Windsor Hill, Conn. *Orn., Oöl., Archæo.* Coll. Ex.

3074. WOODBRIDGE, Dr. J. E., Youngstown, O. *Micros.*

3075. WOODMAN, GEO. S., 116 Fulton St., New York City. *Micros.*

3076. WOODMAN, H. T., 239 17th St., Dubuque, Iowa. *Bot.: Algæ; Geol., Invert.Palæo., Archæo., Ichth., Mollusks, Radiates, Sponges.* Coll.

3077. WOODMAN, Miss KATIE R., 239 17th St., Dubuque, Iowa. *Ferns, Algæ, Mollusks, Radiates.* Coll.

3078. WOODMAN, WALTER, 9 Kirtland Place, Cambridge, Mass. *Orn.* Coll. Ex.

3079. WOODWARD, AUGUSTUS J., M. D., Otter Creek Station, Levy Co., Fla. *Herpetol.*

3080. WOODWARD, E. M., Keene, N. H. *Ent.* Coll. Ex.

3081. WOODWARD, J. G., M. D., Army Med. Mus., Washington, D. C. *Micros.*

3082. WOODWARD, L. F., Worcester, Mass. *Orn., Zoöl.*

3083. WOODWARD, W. ELLIOTT, 258 Dudley St., Roxbury, Mass. *Archæo., Indian Antiquities, Mound-builders' Pottery, Relics of the Stone Age.* Coll. Ex.

3084. WOODWORTH, JOHN M., M. D., Washington, D. C. *Zoöl., Comp. Anat.*

3085. WOODWORTH, LUKE, M. D., Johnson's Creek, Niagara Co., N. Y. *Bot.* Coll.

3086. WOOLFENDEN, FREDERICK, Detroit, Mich. *Nat. Hist.*

3087. WOOLLEY, CHAS. F., Eatontown, Monmouth Co., N. J. *Anthropol.: Archæo., Ethnol.* Coll. Ex.

3088. WOOLMAN, GEO. S., 116 Fulton St., New York City. *Micros.*

3089. WOOLSEY, GEORGE, New Haven, Conn. *Orn., Oöl.* Coll.

3090. WOOLSON, GEORGE C., Passaic, N. J. *Bot.: Cultivation of Native Plants.* Coll. Rare Bulbs and Ferns wanted in exchange for other living sorts.

3091. WOOLSON, M., Concord, N. H. *Min., Zylology.* Coll. Ex.

3092. WOOSTER, L. C., Instructor of Nat. Sci., State Normal School, Whitewater, Wis. *Bot., Geol., Palæo.* Coll. Ex.

3093. WORCESTER, GEO. W., West Side, Crawford Co., Iowa. *Bot.* Coll. Ex.

3094. WORCESTER, HENRY P., Norfolk, Va. *Bot.*

3095. WORSTER, JOSEPH, M. D., 1153 30th St., New York City. *Geol.*

3096. WORTHEN, Prof. AMOS H., State Geologist, Springfield, Ill. *Geol., Palæo.* Coll. Ex.

3097. WORTHEN, CHAS. K., Warsaw, Ill. *Orn., Tax.* Coll. Ex.

3098. WORTHEN, Rev. H. W., Chelsea, Vt. *Palæo., Geol., Min., Archæo., Vert., Ent., Mollusks.* Coll. Ex.

3099. WORTHINGTON, C. E., Chicago, Ill. *Lepidoptera: Bombycidæ.* Ex.

3100. WORTHINGTON, W. W., Shelter Island, Suffolk Co., N. Y. *Orn., Oöl., Tax.* Coll. Ex.

3101. WRENSHALL, R. C., 94 Diamond St., Pittsburg, Pa. *Orn., Emb., Micros.; Ent.: Coleoptera.*

3102. WRIGHT, ALBERT A., Prof. of Geol. and Nat. Hist., Oberlin Coll., Oberlin, O. *Geol., Zoöl.* Ex.

3103. WRIGHT, Prof. BERLIN H., Penn Yan, Yates Co., N. Y. *Palæo., Min., Mollusca.* Coll. Ex.

3104. WRIGHT, CHAS., Wethersfield, Conn. *Bot.* Coll.

3105. WRIGHT, FRANK S., Auburn, N. Y. *Orn., Oöl.* (Coll.) *Tax.* (Ex.)

3106. WRIGHT, GEO. W., West New Brighton, Staten Island, N. Y. *Bot.* Coll.

3107. WRIGHT, HENRY J., East Templeton, Mass. *Nat.Hist.* Coll. Ex.

3108. WRIGHT, R. RAMSAY, A. M., B. Sc., Prof. of Nat. Hist., Univ. Coll., Toronto, Can. *Gen.Comp.Anat., Helminthology.*

3109. WRIGHT, SAMUEL H., A. M., Ph. D., Penn Yan, Yates Co., N. Y. *Phæn.Bot., Micros.* Coll. Ex.

3110. WRIGHT, W. G., Collector of Ferns, San Bernardino. Cal. *Phæn.Bot., Ferns, Ethnol.*

3111. WÜRTELE, Rev. L. C., Acton Vale, Quebec, Can. *Coleoptera.*

3112. WURTZ, Prof. HENRY, 12 Hudson Terrace, Hoboken. N. J.

3113. WYCKOFF, WM. C., Editor of "Science News," 44 Howard St., New York City.

3114. WYLLYS, CHAS. A., Rockville, Conn. *Orn., Tax.*

3115. WYMAN, WM. S., Prof. in Univ. of Ala., Tuscaloosa, Ala. *Am.Archæo and Ethnol.*

3116. WYTHE, Rev. J. H., 759 Market St., San Francisco, Cal. *Micros.*

3117. YANDELL, Prof. LUNSFORD P., M. D., 6th & Chestnut Sts., Louisville, Ky. *Ferns; Palæo.: Crinoids.* Coll.

3118. YARROW, H. C., M. D., Army Med. Mus., Washington, D. C. *Ethnol., Gen. Zoöl., Ichth., Herpetol.*

3119. YATES, LORENZO G., M. D., Centreville, Alameda Co., Cal. *Palæo., Archæo., Micros., Phæn.Bot., Ferns, Algæ, Mosses, Bibliog. of Sci., Geog.Distrib., Anthropol., Orn., Min., Fossil Vert., Invert. Fossils of N. A. and Europe, L., F. W. and Marine Shells, Geol.* Coll. Ex.

3120. YATES, WALTER S., Centreville, Cal. *Phæn. Bot., Coleoptera.* Coll. Ex.

3121. YATES, W. G., 105 Bank St., Cleveland, O. *Micros.*
3122. YOUMANS, Miss ELIZA, 2 E. 15th St., New York City. *Bot.*
3123. YOUNG, A. HARVEY, Hanover Coll., Hanover, Ind. *Bot., Geol.* Coll. Ex.
3124. YOUNG, A. R., 330 Quincy St., Brooklyn, L. I., N. Y. *Phæn. Bot., Ferns, Mosses, Algæ, Con.* Coll.
3125. YOUNG, H. *N.*, Galva, Ill. *Phæn. Bot.: Gramineæ, Cyperaceæ.*
3126. YOUNG, Mrs. M. J., Houston, Harris Co., Tex. *Bot.* Coll.
3127. YOUNG, SILAS C., Edenville, Orange Co., N. Y. *Min.* Coll. Ex.
3128. YOUNG, S. L., Reading, Pa. *Min.*
3129. YOUNGHUSBAND, L., M. D., LL. D., 67 Adams Ave. W., Detroit, Mich. *Micros.*
3130. YOUNGS, GEO. R., C. E., Penn Yan, Yates Co., N. Y. *Bot.* Coll. Ex.
3131. ZABRISKIE, Rev. J. L., New Baltimore, Greene Co., N. Y. *Hymenoptera, Fungi.*
3132. ZABRISKIE, N. L., Aurora, N. Y. *Micros.*
3133. ZAHM, S. H., Lancaster, Pa. *Orn., Oöl.* Coll. Ex.
3134. ZELL, LYDIA D., Lancaster, Pa. *Phæn. Bot., Ferns, Mosses, Fungi.*
3135. ZENTMAYER, CHAS., 147 So. Fourth St., Phila., Pa. *Micros.*
3163. ZENTMAYER, JOSEPH, 147 So. Fourth St., Phila., Pa. *Manufacturer of Microscopes.*
3137. ZESCH, FRANK, 500 Main St., Buffalo, N. Y. *Coleoptera.* Coll. Ex.
3138. ZIMMERMAN, CHAS. D., 571 Main St., Buffalo, N. Y. *Ent.: Coleoptera, Lepidoptera.* Coll. Ex.
3139. ZIMMER, J. C., Cairo, Ill. *Archæo.* Coll. Ex.

INDEX.

☞ *The Numbers refer to the Names in the body of the work.*

ALABAMA.

ANTHROPOLOGY, 2414. *Archæo.*, 3115. *Ethnol.*, 3115.
BOTANY, 1867, 2151, 2331, 2814. *Phæn.Bot.*, 1919, 2543. *Ferns*, 1919, 2151, 2543. *Mosses*, 1919.
EMBRYOLOGY, 2414.
ENTOMOLOGY, 1962. *Arachnida*, 2414. *Coleoptera*, 2414.
GEOLOGY, 1035, 1867, 2414, 2543.
MICROSCOPY, 261.
MINERALOGY, 1035, 1867, 2414, 2543. *Metall.*, 2414.
MOLLUSKS, 21.
PALÆONTOLOGY, 1867, 2414.
ZOOLOGY, 1867.

ARIZONA TERR.

GEOLOGY, 45.
MINERALOGY, 2341.

ARKANSAS.

BOTANY, 1230. *Phæn.Bot.*, 1230. *Ferns*, 1230.
GEOLOGY, 320, 1087, 1230.
MINERALOGY. *Lithol.*, 1087.
PALÆONTOLOGY, 1087.

CALIFORNIA.

ANTHROPOLOGY, 1112, 3119. *Archæo.*, 329, 780, 956, 3119. *Ethnol.*, 716, 3110. *Philology*, 1723.
ARTICULATES. *Crustacea*, 1266, 1574, 1734.
BIBLIOG. OF SCI., 3119.
BOTANY, 81, 102, 302, 449, 564, 627, 628, 631, 668, 816, 1319, 1574, 1612, 1904, 1932, 2441, 2571, 2761. *Phæn.Bot.*, 50, 253, 456, 2028, 2131, 2194, 3110, 3119, 3120. *Crypt.Bot.*, 54, 2194. *Algæ*, 54, 253, 330, 449, 573, 780, 956, 1626, 1688, 2194, 2479, 2571, 2812, 3119. *Diatoms*, 2812. *Ferns*, 54, 269, 382, 456, 573, 956, 1491, 2131, 2194, 2459, 2571, 3110, 3119. *Fungi*, 54, 1206, 1542. *Mosses*, 1491, 1612, 2194, 3119. *Horticulture*, 252.
EMBRYOLOGY, 1965.
ENTOMOLOGY, 1626, 1683, 1734, 2459. *Arachnida*, 860, 1612. *Coleoptera*, 160, 188, 221, 269, 290, 419, 816, 914, 1411, 1574, 2306, 2790, 2971, 3120. *Lepidoptera*, 160, 220, 221, 914, 1574, 2194. *Myriopoda*, 860.
GEN. BIOLOGY, 555, 1179, 1673, 1965.
GEN. NAT. HIST. 1669, 1683, 2382, 2441.
GEOG. DISTRIB. 1574, 2628, 3119.
GEOLOGY, 139, 329, 631, 716, 847, 1078, 1179, 1195, 1319, 1392, 1673, 2761, 3119.
MICROSCOPY, 58, 83, 139, 329, 380, 555, 716, 758, 935, 1206, 1370, 1480, 1574, 1604, 1626, 1683, 1930, 1932, 1965, 2024, 2194, 2479, 2812, 3008, 3116, 3119.
MINERALOGY, 357, 449, 456, 668, 756, 775, 847, 1179, 1195, 1392, 1494, 1890, 2051, 2441, 2459, 2560, 2711, 2860, 3119. *Lithol.* 1494. *Metallurgy*, 536, 1179.

MOLLUSKS, 252, 329, 337, 449, 458, 631, 668, 775, 780, 816, 956, 1067, 1266, 1278, 1568, 1574, 1669, 1734, 2051, 2068, 2194, 2459, 2628, 2710, 2711, 3119.
NAT. SCI., 1322.
ORNITHOLOGY, 25, 269, 338, 417, 419, 567, 632, 873, 1132, 1370, 1542, 1574, 1669, 1719, 2274, 3119. *Oölogy*, 269, 338, 419, 632, 775, 1067, 1132, 1542, 2051, 2274. *Taxidermy*, 509.
PALÆONTOLOGY, 357, 449, 668, 1195, 3119. *Invert. Palæo.*, 956, 1568, 3119.
RADIATES, 1574, 1734.
VERTEBRATES, 1734, 3119. *Amphibians*, 1574. *Fishes*, 1574. *Reptiles*, 1574. *Histol. of Vert.* 1965.
ZOOLOGY, 631, 860, 1132, 1203, 1612, 1722.

COLORADO.

ANTHROPOLOGY. *Archæology*, 2266, 2502.
ARTICULATES, 31.
BOTANY, 872, 2121. *Phæn. Bot.* 355. *Ferns*, 355, 2121. *Mosses*, 355.
EMBRYOLOGY. *Invert. Emb.*, 1582.
GEN. NAT. HIST., 1644.
GEOLOGY, 140, 872, 988, 1320, 1582, 1644, 2266, 2562, 2717, 2952.
MICROSCOPY, 872, 2106, 2403.
MINERALOGY, 15, 667, 675, 872, 1320, 1582, 2121, 2256, 2562, 2952. *Metallurgy*, 140.
ORNITHOLOGY, 15, 762, 804, 2266, 2797. *Oölogy*, 15.
PALÆONTOLOGY, 872, 1582, 2502, 2952.
VERTEBRATES, 31. *Mammalogy*, 15, 2797. *Osteology*, 804, 2502.
ZOOLOGY, 988.

CONNECTICUT.

ANTHROPOLOGY. *Archæo*, 56, 64, 869, 1848, 2236, 3073. *Ethnol.* 56.
ARTICULATES. *Crustacea*, 712, 1204, 2572. *Worms*, 2856.
BIBLIOG. OF SCI., 307.
BOTANY, 259, 366, 499, 585, 650, 702, 759, 794, 836, 870, 961, 1170, 1848, 2058, 2109, 2853, 3104. *Phæn. Bot.*, 35, 728, 2604. *Crypt. Bot.*, 2604. *Algæ*, 836. *Ferns*, 759, 836, 2096, 2604. *Mosses*, 35, 585. *Orchids*, 759.
COMP. ANAT., 1782.
EMBRYOLOGY, 499, 2439. *Invert. Emb.*, 2856.
ENTOMOLOGY, 176, 585, 640, 702, 794, 1385, 1512, 2026, 2095, 2096, 2109, 2116, 2551. *Coleoptera*, 585, 3038. *Diptera*, 3038. *Hymenoptera*, 2026, 2109. *Lepidoptera*, 70, 585, 794.
GEN. BIOL., 499, 2095, 2572, 2856.
GEOG. DISTRIB., 2856.
GEOLOGY, 64, 275, 650, 712, 1002, 1512, 1848, 2095, 2291, 2336, 2856.
INVERTEBRATES, 2058, 2261, 3041.
MICROSCOPY, 259, 366, 499, 532, 794, 843, 1801, 1848, 2058, 2095, 2118.
MINERALOGY, 35, 64, 275, 307, 416, 650, 711, 712, 843, 1002, 1249, 1385, 1512, 1523, 1659, 1680, 1698, 1848, 2025, 2058, 2095, 2236, 2336, 2481, 2514, 2763, 2876, 3002. *Crystallog.*, 711. *Lithol.*, 1249. *Metall.*, 275, 1512, 2514.
MOLLUSKS, 2058, 2856.
OPTICS, 273.
ORNITHOLOGY, 354, 580, 640, 870, 1125, 1170, 1402, 1543, 1630, 1733, 1948, 2011, 2062, 2366, 2497, 2550, 2856, 2867, 2972, 3020, 3038, 3073, 3089, 3114. *Oölogy*, 869, 1543, 1632, 1733, 2011, 2972, 3020, 3073, 3089. *Taxidermy*, 1630, 3114.
PALÆONTOLOGY, 64, 1204, 1659, 1782, 2261, 2876. *Vert. Palæo.*, 1125, 3038.
PHOTOGRAPHY, 273.
PHYSICAL GEOG., 366.
PROTOZOA. *Sponges*, 2856.

RADIATES, 712, 2856.
SANITARY SCIENCE, 499.
SOCIOLOGY, 2336.
VERTEBRATES, 1948. *Amphibians*, 2550. *Fishes*, 580, 1948. *Mammals*, 580, 2241. *Osteology*, 1125. *Reptiles*, 1948, 2062, 2550. *Histol. of Vert.*, 499.
ZOOLOGY, 1204, 2291.

DELAWARE.

BOTANY, 2725. *Phæn.Bot.*, 474, 599. *Diatoms*, 913. *Ferns*, 474, 2725.
MINERALOGY, 480.
ORNITHOLOGY, 452.

DIST. OF COLUMBIA.

ANTHROPOLOGY, 242, 706, 1800, 2264, 2778. *Archæo.*, 694, 1379, 2264. *Ethnol.*, 694, 2065, 2214, 2264, 3118. *Philol.*, 2214.
ARTICULATES, 2309. *Crustacea*, 2685. *Entozoa*, 2394.
BIBLIOG. OF SCI., 641, 1051.
BOTANY, 72, 528, 2309, 2576, 2847, 2899. *Phæn.Bot.*, 1069, 1237. *Crypt.Bot.*, 2443. *Ferns*, 1069.
COMP. ANAT., 3084.
EMBRYOLOGY, *Vert.Emb.*, 641, 2394.
ENTOMOLOGY, 601, 788, 2309, 2396. *Arachnida*, 1796. *Coleoptera*, 2139, 2396, 2821. *Lepidoptera*, 2396.
GEN. BIOLOGY, 242, 641, 1051, 2394. 2899.
GEN. NAT. HIST., 690, 1069, 2647.
GEOG. DISTRIB., 641, 1069, 1237, 2308.
GEOLOGY, 822, 1049, 1254, 1379, 1741, 2113, 2214, 2974, 3040.
MICROSCOPY, 84, 343, 436, 442, 690, 1594, 1678, 2023, 2065, 2206, 2394, 2443, 2733, 3081.
MINERALOGY, 590. 1354, 1524, 1741.
MOLLUSKS, 706, 1051, 1237.
ORNITHOLOGY, 1289, 2308.
PALÆONTOLOGY, 1051, 2974.
PHOTOGRAPHY, 2065.
PHYSICAL GEOG., 1005.
VERTEBRATES. 641, 2065, 2396. *Amphibians*, 1069. *Fishes*, 201, 1051, 1069, 3118. *Mammals*, 1051, 1069. *Osteol.*, 1051, 2065. *Reptiles*, 406, 1069, 3118. *Histol. of Vert.*, 2394.
ZOOLOGY, 3084, 3118.

FLORIDA.

ARTICULATES. *Microscopic Crustacea*, 917.
BOTANY, 501, 508, 692, 983. *Phæn.Bot.*, 1982, 2287. *Algæ*, 693, 904, 917. *Desmids*, 917. *Diatoms*, 917. *Ferns*, 904, 2287.
ENTOMOLOGY. *Coleoptera*, 85. *Hemiptera*, 85. *Lepidoptera*, 85.
GEN. NAT. HIST., 85.
GEOLOGY, 2327.
MICROSCOPY, 501, 2810. *Microscopic Crustacea and Infusoria*, 917.
ORNITHOLOGY, 85, 2176, 2623. *Oölogy*, 2176. *Taxidermy*, 2623.
PROTOZOA. *Infusoria*, 904. *Microscopic Infusoria*, 917.
VERTEBRATES. *Herpetology*, 3079.

GEORGIA.

ANTHROPOLOGY, *Archæology*, 346.
BIBLIOG. OF SCI., 346.
BOTANY, 346, 1887, 1995, 2687.
ENTOMOLOGY, 3016. *Arachnida*, 2687. *Coleoptera*, 1887. *Diptera*, 2687. *Lepidoptera*, 1887, 2208, 2687.
GEOLOGY, 346, 1714, 1735, 1837, 1858, 1887, 2405, 3016.
MICROSCOPY, 1887.
MINERALOGY, 1858, 2405. *Lithol.*, 346, 1718. *Metall.*, 2405.
MOLLUSKS, 2208.

PALÆONTOLOGY, 346, 1858, 2521. *Invert.Palæo.*, 2405.

ILLINOIS.

ANTHROPOLOGY, 1279, 2407. *Archæo.*, 11, 69, 175, 331, 349, 463, 525, 558, 841, 891, 892, 1154, 1342, 1361, 1562, 1783, 1784, 1821, 1927, 1949, 2138, 2145, 2298, 2645, 2809, 2874, 3031, 3139. *Ethnol.*, 550, 2809. *Philol.*, 2809.
ARTICULATES. *Crustacea*, 953, 2072, 3031.
BIBLIOG. OF SCI., 2845.
BOTANY, 55, 59, 68, 175, 212, 291, 292, 360, 364, 388, 391, 402, 466, 473, 487, 578, 853, 854, 980, 1064, 1169, 1208, 1213, 1217, 1232, 1504, 1569, 1776, 1784, 1854, 1913, 1920, 2039, 2105, 2137, 2237, 2407, 2461, 2504, 2588, 2650, 2668, 2700, 2845, 2951, 3024. *Phæn.Bot.*, 321, 892, 932, 1265, 1321, 1377, 1490, 1636, 2286, 2645, 2726, 3062, 3125. *Crypt.Bot.*, 177, 207, 584, 832, 932, 1490, 2828, 2997, 3062. *Algæ*, 854, 1377, 1871. *Desmids*, 1976. *Diatoms*, 1976, 2496, 2746. *Ferns*, 487, 892, 932, 1377, 1490, 1976, 2286, 2461, 2828, 3039, 3062. *Fungi*, 147, 445, 1490, 2694, 3062. *Mosses*, 892, 1321, 1490, 3062. *Horticulture*, 2072, 2073, 2828.
COMP. ANAT., 962.
EMBRYOLOGY. 138, 2845. *Vert.Emb.*, 207. *Invert.Emb.*, 2072.
ENTOMOLOGY, 292, 306, 391, 613, 838, 849, 908, 980, 1012, 1018, 1352, 1895, 1971, 1992, 2094, 2112, 2221, 2259, 2286, 2477, 2493, 2540, 2691, 2714, 2724, 2726, 2748, 2845, 2931, 2997. *Arachnida*, 137. *Coleoptera*, 1305, 1306, 1825, 1971, 1992, 2800, 2931, 2937. *Hymenoptera*, 2540, 3046. *Lepidoptera*, 158, 202, 980, 1305, 1306, 1969, 1971, 2800, 3099. *Orthoptera*, 2748.
GEN. BIOL., 143, 623, 691, 881, 992, 1534, 1592.
GEN. NAT. HIST., 175, 578, 2089, 2137, 2337, 2744.
GEOG. DISTRIB., 138, 364, 2726, 2845.
GEOLOGY, 11, 68, 143, 175, 331, 333, 391, 402, 463, 475, 512, 525, 535, 550, 558, 582, 613, 841, 856, 891, 908, 976, 980, 996, 1043, 1154, 1208, 1321, 1342, 1361, 1562, 1776, 1784, 1803, 1832, 1851, 1920, 1949, 1961, 2072, 2073, 2138, 2471, 2504, 2668, 2720, 2726, 2732, 2744, 2873, 2874, 2960, 2997, 3031, 3056, 3067, 3096.
HISTOLOGY, 691, 853, 992, 1871.
MICROSCOPY, 55, 97, 143, 147, 178, 207, 222, 295, 356, 445, 473, 487, 623, 691, 713, 725, 769, 853, 881, 992, 1010, 1159, 1399, 1502, 1504, 1534, 1544, 1652, 1668, 1871, 1895, 1976, 2048, 2187, 2496, 2634, 2694, 2704, 2724, 2869.
MINERALOGY, 68, 175, 402, 475, 550, 582, 1154, 1217, 1504, 1562, 1784, 1803, 1949, 2072, 2259, 2673, 2726, 2874, 2960, 3031, 3056, 3067. *Lithol.*, 2645. *Metall.*, 980.
MOLLUSKS, 69, 349, 466, 1143, 1169, 1255, 1280, 1361, 1372, 1783, 1784, 1949, 1992, 2072, 2504, 2854, 3031.
NAT. SCI., 53, 295, 535, 1340.
OPTICS, 425.
ORNITHOLOGY, 36, 138, 391, 559, 576, 838, 908, 1279, 1281, 1377, 1553, 1857, 1961, 1971, 1997, 2039, 2094, 2399, 2493, 2524, 2691, 2723, 2744, 2800, 2809, 2854, 2873, 2997, 3031, 3097. *Oölogy*, 838, 1280, 1857, 1961, 2094, 2691. *Taxidermy*, 36, 838, 1569, 2039, 2524, 3097.
PALÆONTOLOGY, 11, 143, 485, 512, 535, 856, 890, 892, 976, 1043, 1217, 1264, 1321, 1565, 1708, 1767, 1783, 1784, 1821, 1832, 1851, 1900, 1918, 2310, 2588, 2645, 2649, 2732, 2828, 2841, 3031, 3096. *Invert. Palæo.*, 475, 996, 1143, 1592, 1992, 2072, 3062.
PHOTOGRAPHY, 2039, 2694.
PHYSIOLOGY, 962.
PROTOZOA. *Infusoria*, 97.

VERTEBRATES, 2073, 2407, 2726. *Fishes*, 137, 733, 1553, 1912, 1997, 2997. *Mammals*, 1281, 1553, 2039, 2723, 2854. *Osteology*, 364, 881. *Reptiles*, 733, 1553, 1997.
ZOOLOGY, 177, 207, 769, 953, 1708, 1776, 2089, 2222, 2568, 2720. 2873, 2997, 3003.

INDIANA.

ANTHROPOLOGY, 2320. *Archæo.*, 79. 296, 298, 455, 587, 1041, 1727, 1826, 1891, 1931, 2412, 2602, 2656, 2707, 2780. *Ethnol.*, 1826, 1968.
ARTICULATES, 2392. *Crustacea*. 2531.
BOTANY, 9, 114, 156, 643, 647, 1045, 1076. 1554, 1555, 2275, 2392, 2412, 2602, 3123. *Phæn. Bot.*, 125, 490, 500, 644, 785. 893, 1027, 1365, 2466. *Crypt.Bot.*, 1157. *Algæ*, 1347, 1555, 2412, *Ferns*, 125, 490, 1157, 1555. 2412, 2435, 2545. *Fungi*, 2412. *Mosses*, 1157, 2412, 2545. *Horticulture*, 298. 301.
ENTOMOLOGY, 130, 133, 268, 296, 821, 887, 907, 1436, 1826, 2036, 2147, 2248, 2602, 2830. *Coleoptera*, 20, 130, 268, 1436, 1696. *Lepidoptera*, 20, 887. 1436, 2147, 2698.
GEN. BIOL., 805, 2490.
GEN. NAT. HIST., 1471, 2752.
GEOG. DISTRIB., 1554, 2490.
GEOLOGY, 9, 114, 296, 298, 316, 464, 500, 587, 653, 703, 785, 848, 1041, 1076. 1149, 1196, 1346, 1709, 1729, 1755, 1931, 1958, 2192, 2320, 2412, 2506, 2602, 2707, 2780, 2829, 2914, 2928. 3123.
MICROSCOPY, 9, 114, 193, 566, 805, 894, 1148, 1259, 1298, 1462, 1729, 1805, 2275, 2316, 2467, 2531, 2532, 2707. 2939.
MINERALOGY, 79, 114, 296, 298, 500, 653, 1196, 1727, 2192, 2412, 2780, 2829, 3006. *Metall.*, 1346.
MOLLUSKS, 20, 455, 665, 895, 1153, 1365, 1696, 2392.
NAT. SCI., 2435. 2773.
ORNITHOLOGY, 296, 455, 647, 666, 895, 1045, 1541, 1554, 1555, 1639, 2242, 2557. *Oölogy*, 907, 2830. *Taxidermy*, 666, 2557, 2752.
PALÆONTOLOGY, 114, 298, 464, 500, 703, 1041, 1076, 1196, 1346, 1727, 1755, 2192, 2392, 2506, 2602, 2928. *Invert.Palæo.*, 1157, 1709, 2466.
PHOTOGRAPHY, 1346.
PROTOZOA, 2392. *Infusoria*, 2392. *Sponges*, 2392.
RADIATES, 174, 2392. *Crinoids*, 174.
VERTEBRATES. *Fishes*, 361, 895. 1045, 1554, 1555, 2531. *Mammalogy*, 893, 1541, 1555, 2242. *Osteology*, 2935. *Reptiles*, 1554. 1555. 1696.
ZOOLOGY, 810, 2413, 2970.

IOWA.

ANTHROPOLOGY, 906. *Archæo.*, 720, 905, 906, 1174, 1447, 1711, 1744, 1812, 1813, 1840, 1981, 2074, 2217, 3076. *Ethnol.*, 1447, 2769. *Paleology*. 1353.
ARTICULATES. *Worms*, 729.
BOTANY, 67, 80, 154, 243, 326, 439, 731, 1393, 1454, 1487, 1551, 1681, 1774, 1818, 1828, 1985, 2047, 2098, 2284. 2734, 2894, 3076, 3093. *Phæn.Bot.*, 777, 859, 1246, 1382, 1397, 1488, 2008, 2842. *Crypt.Bot.*, 777. *Algæ*, 3076, 3077. *Ferns*, 729. 859, 1246, 3077. *Fungi*, 729, 1382. *Mosses*, 729, 859.
EMBRYOLOGY. 2240.
ENTOMOLOGY, 1123, 1192, 1488, 1498, 1551, 1681, 1842, 2008, 2240, 2776, 2893, 2894. 2906. *Arachnida*, 2240. *Coccidæ*, 2240. *Coleoptera*, 363. 1123, 1355, 1564, 2284, 2894. *Hymenoptera*, 363. *Lepidoptera*, 1355, 2074, 2091, 2893, 3061. *Myriopoda*, 729. *Orthoptera*, 363. *Solpugidæ*, 2240.

GEN. BIOL., 197, 898, 1246.
GEN. NAT. HIST., 2476.
GEOLOGY, 154, 164, 591, 718, 729, 777, 905, 1192, 1353, 1447, 1454, 1551, 1571, 1774, 1812, 1813, 2056, 2074, 2217, 2226, 2390, 2769, 2776, 2842, 2906, 3076. *Strat. Geol.*, 2091. *Superficial Geol.*, 1840.
MICROSCOPY, 418, 545, 898, 1093, 1382, 1397, 1454, 2311, 2344.
MINERALOGY, 461, 591, 729, 937, 1454, 1487, 1614, 1774, 2056, 2712. *Lithol.*, 2226.
MOLLUSKS, 714, 1498, 1711, 2091, 2217, 2476, 2734, 2776, 2906, 3061, 3076, 3077.
NAT. SCI., 482, 2728.
ORNITHOLOGY, 197, 310, 1096, 1131, 1192, 1454, 1498, 1551, 1571, 1960, 2074, 2091, 2734, 2842, 2964. *Oölogy*, 197, 1131, 1192, 1551, 2074, 2964.
PALÆONTOLOGY, 164, 310, 591, 718, 937, 1447, 1614, 1711, 1828, 2029, 2056, 2769, 2866. *Invert. Palæo.*, 905, 1737, 2091, 2734, 3076.
PROTOZOA. *Sponges*, 3076.
RADIATES, 3076, 3077.
VERTEBRATES. *Fishes*, 3076.
ZOOLOGY, 154, 469, 1393, 2906.

KANSAS.

ANTHROPOLOGY, 813, 2754. *Archæo.*, 484.
BOTANY, 2203, 2204, 2352, 2523, 2581, 2657, 2922, 2969, 3044. *Phæn. Bot.*, 484, 1419, 2083, 2202. *Ferns*, 484, 1419, 3044.
ENTOMOLOGY, 484, 723, 1020, 1090, 1135, 1459, 2202, 2581. *Coleoptera*, 12, 629, 1135, 2202, 2581. *Diptera*, 1020. *Lepidoptera*, 12, 2581.
GEOG. DISTRIB., 2202.
GEOLOGY, 484, 630, 1419, 1459, 1967.
MICROSCOPY, 484, 1511.
MINERALOGY, 484, 507, 630, 2102, 2754.
MOLLUSKS. *Gasteropoda*, 2523.
ORNITHOLOGY, 262, 484, 767, 1090, 2523, 2581, 2922. *Taxidermy*, 262, 488.
PALÆONTOLOGY, 517, 2659, 2754. *Invert. Palæo.*, 767.
VERTEBRATES. *Amphibians*, 1020. *Mam.*, 2523. *Reptiles*, 1020.
ZOOLOGY, 262, 2754.

KENTUCKY.

ANTHROPOLOGY, 2171. *Archæo.*, 1617, 1712.
BOTANY, 662, 679, 737, 943, 1716, 2082, 2201, 3032. *Phæn. Bot.*, 2149. *Ferns*, 1622, 1712, 3032, 3117. *Horticulture*, 93.
ENTOMOLOGY, 1822, 2510. *Coleoptera*, 2803. *Lepidoptera*, 2803.
GEN. BIOL., 1366.
GEOLOGY, 662, 682, 901, 943, 1238, 1287, 1617, 1622, 1712, 2030, 2150, 2881. *Strat. and Surface Geol.*, 2228.
HISTOLOGY, 2086.
MICROSCOPY, 27, 392, 457, 481, 504, 662, 679, 1521, 1795, 1864, 2080, 2086, 2765.
MINERALOGY, 1173, 2150, 2565. *Lithology*, 1712.
MOLLUSKS, 1238, 1622.
ORNITHOLOGY, 2000.
PALÆONTOLOGY, 662, 1173, 1570, 1617, 2000, 3117. *Invert. Palæo.*, 735, 1622, 1712, 2030.
PATHOLOGY, 1795.
PHOTOGRAPHY, 662, 2086.
RADIATES. *Crinoids*, 3117. *Polypi*, 735.
ZOOLOGY, 901, 1286.

LOUISIANA.

ENTOMOLOGY, 1703. *Coleoptera*, 2785.
GEOLOGY, 2882.
MICROSCOPY, 563, 1634, 2406, 2580.
PHYSIOLOGY, 2882. *Vegetable Physiol.*, 1634.

MAINE.

ANTHROPOLOGY. *Archæology*, 1183, 2475.
BOTANY, 331, 430, 579, 1376, 1773, 2111. *Phæn.Bot.*, 2667, 2998, 3004. *Ferns*, 2667. *Horticulture*, 1349.
ENTOMOLOGY, 239, 342, 926, 1773. *Lepidoptera*, 926.
GEN. BIOL., 1675.
GEN. NAT. HIST., 921.
GEOLOGY, 332, 1773, 2110, 2111, 2614, 3004. *Surface Geol.*, 2667.
MINERALOGY, 204, 1183, 1376, 1773, 2111, 2323, 2472, 2544, 2553, 3004. *Lithol.*, 2475.
MICROSCOPY, 430, 1201.
MOLLUSKS, 2475.
NAT. SCI., 579.
ORNITHOLOGY, 215, 271, 332, 398, 403, 846, 1063, 1199, 1200, 1728, 1849, 1853, 1878, 1899, 1952, 2110, 2475, 2616, 2747. *Oölogy*, 239, 332, 846, 1200, 1728, 1853, 1878, 1952, 2544, 2616, 2638.
PALÆONTOLOGY, 1183. *Invert.Palæo.*, 2475, 3004.
VERTEBRATES. *Fishes*, 89, 2544. *Mammalogy*, 1199. *Reptiles*, 1199.
ZOOLOGY, 990, 1773.

MARYLAND.

ANTHROPOLOGY. *Archæology*, 707.
ARTICULATES. *Crayfish*, 2820.
BOTANY, 263, 2163, 2555, 2563. *Phæn.Bot.*, 16. *Crypt. Bot.*, 3063. *Algæ*, 2563. *Ferns*, 16, 2548, 2563, 3063. *Fungi*, 142. *Mosses*, 2563. *Horticulture*, 2548.
EMBRYOLOGY, 2290. *Invert.Emb.*, 385.
ENTOMOLOGY, 2555. *Coleoptera*, 1749. *Hemiptera*, 2820. *Neuroptera*, 2555, 2820.
GEN. BIOL., 313, 385, 560, 2290.
GEN. NAT. HIST., 786.
GEOLOGY, 263.
HYDROZOA, 560.
MICROSCOPY, 94, 172, 381, 385, 407, 786, 1222, 1297, 1540, 1975, 2127, 2770, 3043.
MINERALOGY, 263, 1674, 1975, 2518.
MOLLUSKS, 385.
ORNITHOLOGY, 3063, 3072, *Oölogy*, 3072.
PALÆONTOLOGY, 1239, 1975, 3063.
SANITARY SCIENCE, 2636.
VERTEBRATES. *Fishes*, 920, 1749, 3063. *Histol. of Vert.*, 313.

MASSACHUSETTS.

ANTHROPOLOGY, 33, 373, 486, 1448, 2216, 2238, 2369, 2566. *Archæo.*, 284, 444, 672, 1040, 1105, 1115, 1323, 1645, 1670, 2125, 2200, 2369, 3083. *Ethnol.*, 672, 1619, 1752, 2369. *Philol.*, 1752.
ARTICULATES, 33, 1152. *Crustacea*, 910. *Worms*, 180, 1778.
BIBLIOG. OF SCI., 1061, 1769.
BOTANY, 181, 225, 305, 322, 592, 604, 709, 840, 883, 909, 924, 936, 970, 1053, 1068, 1070, 1098, 1109, 1176, 1235, 1268, 1345, 1364, 1433, 1450, 1451, 1497, 1519, 1526, 1655, 1725, 1748, 1760, 1789, 1797, 1934, 1990, 2053, 2071, 2093, 2166, 2168, 2183, 2184, 2185, 2186, 2271, 2291, 2324, 2380, 2383, 2430, 2445, 2495, 2561, 2590, 2605, 2655, 2661, 2664, 2745, 2756, 2787, 2923, 3018. *Phæn.Bot.*, 542, 1017, 1057, 1400, 1896, 1944, 1998, 2057, 2277, 2433, 2447, 2448, 2946, 2961, 2977, 3050. *Crypt.Bot.*, 304, 715, 991, 1136, 1310, 1400, 1896, 1934, 2057. *Algæ*, 314, 359, 592, 722, 903, 1161. *Diatoms*, 314, 1108, 1244, 1345, 2661, 2940. *Ferns*, 225, 492, 592, 604, 883, 1017, 1057, 1136, 1161, 1234, 1400, 1408, 1409, 1880, 1896, 2093, 2193, 2324, 2430, 2495, 2618, 2633, 2664, 2946, 2961, 2992. *Fungi*, 327, 903. *Lichens*, 2606, 3018.

Liverworts, 1485. *Orchids*, 149, 1234. *Mosses*, 327, 991, 1408, 1409, 1485, 1508, 1896, 2961. *Horticulture*, 77, 149, 444, 554, 569, 839, 970, 1215, 1229, 1234, 1408, 1429, 2936, 2961, 2968.

COMP. ANAT., 437, 596, 672, 2749, 2844, 2920, 2956. *Vert. Anat.*, 925.

EMBRYOLOGY, 14, 1914, 2239, 2377. *Vert.Emb.*, 1456. *Invert.Emb.*, 1235, 1778.

ENTOMOLOGY, 108, 181, 278, 287, 327, 437, 492, 542, 552, 569, 761, 850, 1017, 1070, 1111, 1119, 1141, 1248, 1288, 1291, 1310, 1364, 1371, 1428, 1433, 1760, 1769, 1926, 2010, 2012, 2019, 2053, 2186, 2239, 2355, 2378, 2554, 2730. *Arachnida*, 876, 2239. *Coleoptera*, 101, 278, 324, 519, 781, 994, 1008, 1141, 1288, 1926, 2005, 2012, 2053, 2424, 2489, 2554, 2730. *Coccidæ*, 2239. *Diptera*, 437. *Hemiptera*, 1778. *Homoptera*, 1778. *Hymenoptera*, 924. *Lepidoptera*, 519, 850, 994, 1008, 1070, 1335, 2005, 2012, 2440, 2546, 2741, 2975, 2991, 3011. *Orthoptera*, 2440. *Solpugidæ*, 2239.

ELECTRICITY, 1244.

GEN. BIOL., 113, 497, 554, 773, 936, 1119, 1448, 1619, 1786, 1980, 2378, 2566.

GEN. NAT. HIST., 411, 776, 945, 1951, 2014, 2093, 2528, 2630, 3107.

GEOG. DISTRIB., 1725, 1775.

GEOLOGY, 132, 173, 181, 234, 238, 323, 367, 435, 453, 557, 618, 678, 736, 779, 1008, 1061, 1165, 1220, 1420, 1465, 1625, 1775, 1777, 1789, 1797, 1884, 1954, 1999, 2017, 2125, 2186, 2329, 2384, 2464, 2469, 2661, 2743, 2781, 2889, 2921, 2938, 2990. *Phys. Geol.*, 497.

HISTOLOGY, 596.

INVERTEBRATES, 180, 621, 1136.

MICROSCOPY, 66, 153, 159, 304, 341, 383, 387, 397, 399, 408, 465, 603, 637, 791, 950, 1074, 1108, 1119, 1136, 1244, 1250, 1257, 1291, 1310, 1371, 1380, 1448, 1497, 1516, 1575, 1591, 1598, 1786, 1856, 1874, 1964, 2035, 2044, 2057, 2125, 2142, 2146, 2183, 2219, 2469, 2595, 2613, 2661, 2670, 2715, 2767, 2857, 2927, 2940, 2953, 3035, 3069.

MINERALOGY, 33, 88, 112, 132, 173, 238, 323, 327, 350, 367, 408, 435, 453, 520, 543, 618, 724, 779, 911, 1040, 1073, 1115, 1119, 1165, 1235, 1244, 1310, 1420, 1465, 1625, 1670, 1789, 1797, 1884, 1934, 1951, 1954, 2063, 2093, 2125, 2146, 2256, 2312, 2346, 2379, 2561, 2590, 2624, 2715, 2735, 2739, 2743, 2756, 2781, 2787, 2889, 2921, 2938, 2988, 2991. *Crystallography*, 911. *Lithology*, 911, 1465, 1598, 1775, 1786, 2346, 2469. *Metallurgy*, 2295. *Petrography*, 2871.

MOLLUSKS, 33, 272, 287, 327, 1073, 1097, 1115, 1184, 1441, 1598, 1797, 1819, 2010, 2012, 2092, 2093, 2312, 2338, 2546, 2624, 2715, 2740, 2760, 2968.

NAT. SCI., 440.

ORNITHOLOGY, 30, 108, 110, 190, 200, 287, 319, 365, 367, 368, 506, 527, 548, 552, 569, 639, 642, 659, 724, 746, 761, 773, 787, 806, 828, 844, 954, 957, 966, 991, 1040, 1107, 1110, 1161, 1166, 1187, 1212, 1248, 1364, 1405, 1428, 1432, 1449, 1451, 1484, 1520, 1529, 1615, 1625, 1645, 1670, 1725, 1752, 1817, 1909, 1915, 1940, 1980, 2042, 2090, 2101, 2235, 2377, 2448, 2546, 2605, 2618, 2757, 2825, 2909, 2913, 2963, 2980, 3000, 3011, 3078. 3082. *Oölogy*, 181, 200, 287, 368, 519, 527, 548, 552, 724, 761, 773, 828, 957, 963, 1040, 1107, 1166, 1212, 1428, 1432, 1645, 1817, 1877, 1909, 1910, 2090, 2101, 2235, 2494, 2709. 2825, 2929, 2980. *Taxidermy*, 182, 200, 319, 411. 823, 945, 1110, 1187, 1529, 1645.

OPTICS, 2777.

OTOLOGY, 270.

PALÆONTOLOGY, 132, 515, 1476, 1725, 1775, 2440, 2464, 2938. *Invert. Palæo.*, 678, 2093.

PHOTOGRAPHY, 1244, 1856, 2170, 2190, 2940.
PHYSICAL GEOGRAPHY, 2017.
PHYSIOLOGY, 52, 325, 1914.
PROTOZOA. *Infusoria*, 1244. *Sponges*, 574, 1797.
RADIATES, 1754, 2212.
SANITARY SCIENCE, 113.
SEISMOLOGY, 373.
VERTEBRATES, 33, 327, 1619. *Fishes*, 98, 284, 561, 1011, 1725, 1754, 1980, 2238, 2671, 2757. *Mammals*, 30, 287, 746, 954, 1187, 1520, 2546, 2757. *Osteology*, 784. *Reptiles*, 190, 746, 1008, 1011, 1725.
ZOOLOGY, 14, 168, 352, 603, 781, 910, 1450, 1476, 1797, 1817, 1953, 2183, 2212, 2433, 2440, 2528, 3000, 3082.

MICHIGAN.

ANTHROPOLOGY, 404, 521, 663, 796, 1054. *Archæo.*, 42, 44, 155, 348, 450, 581, 648, 827, 1293, 1518, 1653, 2632, 2764. *Ethnol.*, 1293, 2896, 3053.
ARTICULATES. *Crustacea*, 796.
BOTANY, 48, 105, 227, 556, 646, 796, 952, 1054, 1311, 1317, 1394, 2079, 2542, 2593, 2626, 2798, 2959, 2965. *Phæn.Bot.*, 199, 1739, 3053. *Diatoms*, 3053. *Ferns*, 199, 556, 1756, 3053. *Fungi*, 2593.
COMP. ANAT., 638, 1316, 2587.
EMBRYOLOGY, 479, 2764. *Vert.Emb.*, 3053.
ENTOMOLOGY, 345, 404, 795, 796, 1316, 1375, 1869, 2330, 2422, 2911. *Coleoptera*, 297, 1316, 1435, 1533, 2422, 2530. *Diptera*, 1533. *Lepidoptera*, 297, 795, 1316, 1533, 2911. *Orthoptera*, 2173.
GEN. BIOL., 131, 479, 521, 2764, 2896.
GEN. NAT. HIST., 1533, 1631, 1846, 1925, 2333, 2577, 3086.
GEOLOGY, 155, 191, 348, 404, 521, 646, 687, 827, 1444, 1446, 1631, 1653, 2153, 2332, 2632, 2784, 3053.
HISTOLOGY. *Animal and Vegetable Histol.*, 1578.
MICROSCOPY, 131, 146, 199, 404, 479, 638, 811, 1247, 1466, 1601, 1928, 2674, 2675, 3068, 3129.
MINERALOGY, 65, 146, 191, 404, 511, 521, 646, 654, 656, 687, 751, 827, 2333, 2999. *Crystallography*, 65, 654. *Metallurgy*, 3023.
MOLLUSKS, 687, 751, 1756, 2686, 2798, 2878.
NAT. SCI., 1118.
ORNITHOLOGY, 90, 511, 593, 648, 795, 818, 1038, 1140, 1277, 1348, 1406, 1445, 1533, 2513, 2772, 2798. *Oölogy*, 42, 44, 593, 648, 818, 1038, 1277, 1406, 1533, 2798. *Taxidermy*, 795, 1277.
PALÆONTOLOGY, 521, 796, 827, 2332, 3053.
SANITARY SCIENCE, 131.
VERTEBRATES, 663. *Fishes*, 1348, 2798. *Mammals*, 511, 648, 1348. *Osteology*, 3053. *Reptiles*, 404, 1038, 1348, 2577.
ZOOLOGY, 593, 617, 1316, 1898, 2173, 2513, 2635.

MINNESOTA.

ANTHROPOLOGY, 1531. *Archæo.*, 2463, 2631. *Ethnol.*, 1563. *Philol.*, 2985.
BOTANY, 472, 1016, 1563, 2313, 2319, 2755. *Phæn.Bot.*, 1295. *Algæ*, 1531. *Desmids*, 1531, *Diatoms*, 1531. *Ferns*, 472, 1691. *Fungi*, 1531.
ENTOMOLOGY, 17, 1295, 1587. *Coleoptera*, 2794. *Lepidoptera*, 2794.
GEN. NAT. HIST., 17, 884.
GEOLOGY, 476, 884, 1016, 1168, 1563, 2313, 3054.
MICROSCOPY, 912, 1295, 1384, 1531, 1587, 2727, 2755.

MINERALOGY, 476, 861, 939, 1168, 2038, 2123, 2559, 3054. *Lithology*, 2559, 3054.
MOLLUSKS, 861.
ORNITHOLOGY, 884, 1243, 1295, 1384, 2319, 2340, 2948. *Oölogy*, 1384, 2038, 2631.
PALÆONTOLOGY. *Invert. Palæo.*, 1295.
PROTOZOA. *Infusoria*, 1531.
VERTEBRATES. *Fishes*, 884, 2716.
ZOOLOGY, 1699.

MISSISSIPPI.

BOTANY, 2322.
ENTOMOLOGY, 1510.
GEN. NAT. HIST., 1552.
GEOLOGY, 2322.
MICROSCOPY, 1539.
VERTEBRATES. *Ophidia*, 1510.

MISSOURI.

ANTHROPOLOGY, 745, 1605, 1695. *Archæo.*, 378, 529, 814, 879, 1548, 1695, 1870, 2004, 2210.
BOTANY, 378, 681, 745, 814, 878, 955, 1062, 1178, 1667, 1922, 1984, 2713, 2788. *Phæn.Bot.*, 311, 857, 1695. *Crypt.Bot.*, 2480. *Diatoms*, 938. *Ferns*, 857, 955, 1695. *Orchids*, 955. *Horticulture*, 1970.
EMBRYOLOGY, 745.
ENTOMOLOGY, 745, 1605, 1685, 1695, 1922, 1984, 2788. *Coleoptera*, 959, 2373, 2420, 2851. *Lepidoptera*, 959, 2373.
ETYMOLOGY, 1202.
GEN. BIOL., 681.
GEN. NAT. HIST., 2802, 2880.
GEOLOGY, 378, 529, 681, 705, 814, 1062, 1202, 1218, 1750, 1906, 2031, 2189, 2210, 2713, 2802.
MICROSCOPY, 420, 518, 745, 879, 938, 1407, 1715, 2209, 2654.
MINERALOGY, 529, 681, 814, 1089, 1407, 1667, 1715, 1870, 1906, 2480, 2573, 2850. *Lithol.*, 1690, 2210. *Metall.*, 1218, 1906, 2210.
MOLLUSKS, 529, 2041, 2373, 2608.
NAT. SCI., 491, 955, 2188.
ORNITHOLOGY, 1468, 1684, 2004, 2996. *Oölogy*, 2004, 2041, 2373.
PALÆONTOLOGY, 376, 529, 745, 814, 1178, 1605, 1750, 2373, 2775. *Invert.Palæo.*, 2031, 2852.
PHYSIOLOGY, 23.
VERTEBRATES, 1605. *Herpetology*, 529.
ZOOLOGY, 705, 2713.

MONTANA.

ORNITHOLOGY, 1879.

NEBRASKA.

BOTANY, 1647. *Floriculture*, 789.
ENTOMOLOGY, 414, 789, 1647. *Lepidoptera*, 790. *Orthoptera*, 739.
GEN. NAT. HIST., 1427.
GEOLOGY, 1647.
MINERALOGY, 2693.
MOLLUSKS, 414, 1095, 1314, 1647.
NAT. SCI., 99.
ORNITHOLOGY, 1427.
PALÆONTOLOGY, 414, 1647.

NEVADA.

BOTANY, 514.
COMP. ANAT., 885.
ENTOMOLOGY, 514.
GEOLOGY. *Phys. Geol.*, 612.
HISTOLOGY, 885.
MICROSCOPY, 885.
MINERALOGY. *Lithology*, 612.

NEW HAMPSHIRE.

ANTHROPOLOGY, 1046. *Archæo.*, 8.
ARTICULATES, 1360.

BOTANY, 274, 944, 1046, 1339, 1360, 1522, 2257, 2870. *Phæn. Bot.*, 167, 1047. *Crypt. Bot.*, 1387, 2967. *Ferns*, 1047, 1339, 1358. *Mosses*, 2343. *Horticulture*, 1047.

COMP. ANAT., 1387.

ENTOMOLOGY, 6, 8, 942, 1071, 1210, 2398, 3080. *Coleoptera*, 2398, 2864. *Lepidoptera*, 2398, 2989. *Tabanidæ*, 2980.

GEN. BIOL., 2229, 2257.

GEN. NAT. HIST., 685, 1210.

GEOLOGY, 6, 802, 915, 1046, 1048, 1210, 1338, 1360, 2343, 2826.

MICROSCOPY, 699, 1916, 2162, 2864, 2872, 2943.

MINERALOGY, 6, 8, 541, 635, 685, 802, 1046, 1048, 1360, 1838, 2343, 3091. *Lithology*, 2967.

MOLLUSKS, 8, 2343, 2967.

NAT. SCI., 1085.

ORNITHOLOGY, 8, 635, 802, 803, 915, 1071, 1210, 2104, 2229, 2672, 2870, 2872. *Oölogy*, 915, 1071, 1210. *Taxidermy*, 803, 915, 2672.

PALÆONTOLOGY, 8. *Vert. Palæo.*, 2257.

PHOTOGRAPHY, 1210.

VERTEBRATES, 2257. *Mammals*, 2672. *Osteology*, 2257, 2967.

ZOOLOGY, 1071.

ZYLOLOGY, 3091.

NEW JERSEY.

ANTHROPOLOGY, 2753, 3087. *Archæo.*, 5, 61, 196, 1145, 1640, 1724, 3087. *Ethnol.*, 1640, 3087.

BOTANY, 74, 300, 426, 1102, 1219, 1762, 1793, 2087, 2353, 2393, 2596, 2793, 3090. *Phæn. Bot.*, 405, 695, 989, 1065, 1138, 1724, 1902, 2731, 2817, 2947. *Desmids*, 2505. *Diatoms*, 49, 2505. *Ferns*, 695, 1065, 1138, 2817, 2947. *Fungi*, 248, 867. *Hepaticæ*, 100. *Lichens*, 100. *Mosses*, 100. *Horticulture*, 1974.

ENTOMOLOGY, 282, 394, 428, 533, 755, 1324, 1861, 1902, 1957, 2159, 2175, 2793. *Coleoptera*, 428, 989, 2159, 2362. *Lepidoptera*, 533, 1726, 2120, 2362.

GEN. BIOL., 1762, 2434, 2505.

GEN. NAT. HIST., 755, 2175, 2539, 2862.

GEOG. DISTRIB., 2573.

GEOLOGY, 61, 63, 741, 1102, 1145, 1324, 1470, 1486, 1640, 1724, 1861, 2179, 2356, 2393, 2541, 2578, 2753.

HISTOLOGY, 237.

MICROSCOPY, 96, 136, 237, 288, 395, 396, 880, 1226, 1724, 2020, 2155, 2158, 2196, 2432, 2505, 2662, 2793, 2811, 2880, 2877, 3034.

MINERALOGY, 61, 73, 96, 196, 477, 541, 674, 741, 1102, 1640, 1761, 2179, 2541. *Crystallog.*, 2947. *Metallurgy*, 2179.

MOLLUSKS, 196, 255, 1483, 1640, 2393.

NAT. SCI., 774.

ORNITHOLOGY, 10, 74, 478, 547, 695, 755, 772, 998, 1296, 1469, 1483, 1902, 1957, 2133, 2175, 2434, 2947. *Oölogy*, 179, 413, 547, 755, 772, 998, 1269, 1469, 2097, 2175. *Taxidermy*, 547, 772.

PALÆONTOLOGY, 61, 541, 1640, 2179, 2356, 2862. *Vert. Palæo.*, 2599. *Invert. Palæo.*, 2753.

PHOTOGRAPHY, 61.

PHYSICAL GEOGRAPHY, 1145.

PHYSIOLOGY. *Experimental Physiol.*, 1815.

PROTOZOA. *Infusoria*, 49, 2505.

VERTEBRATES. *Fishes*, 1802. *Mammals*, 1483. *Histol. of Vert.*, 2811.

ZOOLOGY, 5, 73, 1724.

NEW MEXICO.

BOTANY, 1886.

GEOLOGY, 1886.

NEW YORK.

ANTHROPOLOGY, 217,245, 1163, 1588, 2049, 2318, 2791, 2934, 3036. *Archæo.*, 34, 71, 210. 236, 523, 1980, 1228, 1236, 1418, 1702, 1903, 2169, 2234, 2619, 2759, 2779, 2831. *Ethnol.*, 523, 2018, 2779. *Philol.*, 347, 2018.

ARTICULATES, 1058, 1738. *Crustacea*, 185, 467, 1130. *Worms*, 664, 1082, 2932.

BOTANY, 39, 41, 109, 150, 169, 246, 375, 386, 438, 540, 575. 651, 742, 793, 809, 933, 995, 1042, 1044, 1072, 1117, 1155, 1167, 1189, 1194, 1233, 1304, 1333, 1344, 1374, 1403, 1414, 1440, 1457, 1458, 1477, 1478, 1536, 1538, 1584, 1620, 1641, 1679, 1692, 1702, 1829, 1847, 1903, 1978, 1989, 2018, 2049, 2081, 2119, 2124, 2218, 2232, 2350, 2358, 2416, 2419, 2421, 2470, 2526, 2642, 2652, 2678, 2751, 2766, 2804, 2816, 2824, 2835, 2858, 2885, 2886, 2898, 2900, 2901, 2904, 2981, 2994, 3057, 3085, 3106, 3122, 3130. *Phæn.Bot.*, 95, 276, 347, 390, 427, 441, 586, 676, 719, 740, 927, 993, 1007, 1100, 1129, 1251, 1283, 1334, 1368, 1426, 1689, 2076, 2169, 2231, 2349, 2410, 2450, 2499, 2729, 2737, 2795, 2904, 3001, 3037, 3065, 3109, 3124. *Crypt.Bot.*, 1028, 1120, 1129, 1177, 1849, 1892, 2558, 2888, 2903, 3065. *Algæ*, 782, 1080, 1104, 1120, 1251, 1299, 1341, 1573, 2180, 2558, 2641, 2729, 2833, 3124. *Desmids*, 372, 782, 1104, 2558, 2833. *Diatoms*, 265, 372, 782, 1100, 1146, 1978, 2558, 2833, 2836. *Ferns*, 41, 95, 157, 189, 347, 390, 441, 538, 676, 740, 927, 1007, 1042, 1044, 1100, 1251, 1283, 1299, 1401, 1426, 1689, 1743, 2076, 2349, 2358, 2450, 2641, 2729, 2737, 2795, 2888, 3065, 3124. *Fungi*, 258, 347, 1028, 1104, 1334, 1530, 1657, 2119, 2641, 2729, 2833, 2903, 3131. *Hepaticæ*, 2358. *Lichens*, 165, 1299. *Mosses*, 95, 165, 1251, 1299, 1689, 2358, 2641, 2729, 3065, 3124. *Pomology*, 2751. *Orchids*, 189. *Horticulture*, 165, 740, 1452, 1794, 1978, 2450, 2815, 2816, 2858.

COMP. ANAT., 1000, 1060, 1876, 2676, 3015. *Normal and Pathol. Anat.*, 752.

COSMOLOGY, 2910.

EMBRYOLOGY, 1577, 1892. *Vert.Emb.*, 1082. *Invert.Emb.*, 1657.

ENTOMOLOGY, 18, 32, 43, 152, 185, 401, 431, 651, 765, 933, 1117, 1128, 1231, 1337, 1374, 1414, 1452, 1558, 1573, 1664, 1713, 1827, 1873, 1956, 2018, 2081, 2419, 2470, 2808, 2815, 2816, 2834, 2918, 3138. *Arachnida*, 2180, 2198. *Coleoptera*, 18, 87, 250, 471, 503, 676, 765, 987, 1116, 1253, 1274, 1328, 1558, 1584, 1687, 1873, 2281, 2367, 2397, 2418, 2425, 2426, 2824, 2987, 3137, 3138. *Diptera*, 431, 1584. *Hemiptera*, 1270. *Hymenoptera*, 1082, 3131. *Lepidoptera*, 18, 43, 71, 117, 119, 122, 185, 370, 431, 471, 503, 522, 676, 696, 753, 765, 792, 793, 928, 971, 999, 1086, 1100, 1116, 1130, 1253, 1270, 1274, 1327, 1337, 1584, 1706, 1713, 1855, 1987, 2001, 2719, 2736, 2824, 2834, 2918, 2987, 3138.

GEN. BIOL., 276, 386, 1104, 1130, 1163, 1307, 1413, 1414, 1608, 1657, 2018, 2808, 2900.

GEN. NAT. HIST., 1193, 1363, 2273, 2918.

GEOG. DISTRIB., 467, 1172, 2729.

GEOLOGY, 150, 152, 162, 351, 384, 386, 393, 412, 459, 467, 523, 537, 602, 625, 742, 763, 766, 807, 831, 837, 899, 1066, 1082, 1104, 1172, 1228, 1236, 1251, 1334, 1416, 1418, 1458, 1467, 1559, 1580, 1593, 1595, 1657, 1697, 1757, 1759, 1765, 1787, 1794, 1945, 1977, 2003, 2018, 2049, 2055, 2169, 2234, 2245, 2258, 2260, 2269, 2315, 2507, 2549, 2625, 2629, 2646, 2678, 2729, 2759, 2801, 2804, 2831, 2836, 2875, 2886, 2897, 2983, 3037, 3095.

HISTOLOGY, 752, 997, 1190, 1938, 2791.

HYDROZOA. 1955.

INVERTEBRATES. 336. 532.

MICROSCOPY. 35. 75. 152. 166, 183 186, 216. 265. 292. 332. 372, 441. 454. 597. 625. 626. 634. 652. 689. 695. 705. 725. 754. 777. 782, 825, 835. 871. 874. 875. 916. 980, 982, 984. 985. 999. 1007. 1025. 1029, 1075, 1079. 1084. 1120. 1124. 1133, 1139. 1147. 1162. 1165. 1190. 1205, 1221, 1223, 1312, 1341. 1344. 1378, 1413. 1415, 1429. 1432. 1437. 1440, 1478, 1500. 1525. 1532. 1559. 1561, 1573. 1576. 1613. 1616. 1655. 1704, 1707. 1732. 1799. 1823. 1845, 1856, 1881, 1892, 1905, 1908. 1911, 1923, 1929, 1938, 1942. 1959. 1962. 1978, 1986. 2009. 2018, 2052. 2088. 2148, 2167, 2177, 2182, 2193. 2211. 2234, 2273, 2293, 2359, 2367. 2372. 2374. 2385. 2400. 2410, 2415, 2416, 2429, 2431, 2444, 2478, 2486, 2499. 2522. 2558. 2601. 2641. 2658, 2688. 2708, 2714, 2833, 2836. 2839, 2843. 2858, 2863, 2885, 2898. 2900, 2903, 2905, 2915, 2919, 2945. 2950, 2980, 3025, 3047, 3055, 3060, 3075, 3088, 3109, 3132.

MINERALOGY, 22, 121, 127, 232, 236, 412, 448, 526, 539, 568, 620, 624, 764, 766, 793, 858, 902, 1188, 1228, 1236, 1251, 1309, 1368, 1416, 1477, 1525, 1530, 1577, 1580, 1584, 1702, 1736, 1738, 1787, 1794, 1903, 1917, 1945, 1991, 2018, 2049, 2234, 2245, 2258, 2269, 2304, 2315, 2326, 2391, 2400, 2470, 2610, 2619, 2625, 2629, 2641, 2759, 2804, 2818, 2823, 2831, 2858, 2883, 2897. 3001, 3057, 3103, 3127. *Crystallog.*, 2836, *Lithol.*, 384, 1559. 1945, 2234, 2258, 3001. *Metall.*, 111, 384 539, 858, 1359, 1593, 2245, 2304, 2625, 2629, 2883.

MOLLUSKS, 95, 185, 210, 236, 279, 372, 409, 467, 551, 620, 676, 831, 919, 1060, 1129, 1172, 1185, 1188, 1357, 1588, 1600, 1657, 1701, 1771, 1787, 1903, 1945, 1955, 2006, 2225, 2231, 2804, 3103, 3124.

NAT. SCI., 109, 2838.

OPHTHALMIA. 2642.

OPTICS. 187.

ORNITHOLOGY. 26. 36, 47. 222, 225, 228, 280, 282, 240, 252, 285, 317, 322, 328, 408, 421, 447, 557, 544, 580, 612, 616, 664, 676, 710, 720, 727, 744, 753, 829, 832, 1021, 1022, 1028, 1050, 1104, 1113, 1121, 1155, 1186, 1188, 1242, 1261, 1270, 1271, 1274, 1307, 1343, 1365, 1404, 1421, 1424, 1452, 1473, 1535, 1547, 1612, 1662, 1663, 1664, 1721, 1738, 1745, 1785, 1957, 2032, 2061, 2084, 2099, 2115, 2547, 3260, 2262, 2294, 2354, 2376, 2485, 2556, 2625, 2629, 2643, 2666, 2885, 2886, 2887, 2987, 3013, 3049, 3066, 3071, 3100, 3105. *Oology*, 26. 111. 115. 118. 233, 317, 362, 401, 468. 686. 726. 744. 829, 928, 1116, 1121. 1186. 1270. 1421, 1422, 1547, 1610. 1662. 1634. 1702, 1706, 1721, 1917. 2061, 2115, 2132, 2247, 2262, 2292, 2294, 2354, 2376, 2470, 2488, 2492, 2625, 2629, 2666, 3013, 3049, 3100, 3105. *Taxidermy*, 18, 128, 717, 726. 969, 1271. 1396, 2140, 2292, 2643, 2666, 3066, 3100, 3105.

PALÆONTOLOGY, 22, 34, 128, 262, 236, 315, 467, 523, 602, 620, 793, 899, 1116. 1130, 1172, 1334, 1418, 1467, 1477, 1580, 1608. 1702, 1765, 1787, 1903, 2003, 2040, 2049, 2055, 2507, 2619, 2729, 2804, 2815, 2816, 2823, 2983, 3103. *Invert. Palæo.*, 1416, 1657, 1945, 2391, 2646.

PHOTOGRAPHY, 676, 1525, 1799, 1978, 2169, 2180, 2836.

PHYSIOLOGY, 2898, 3005.

PROTOZOA, 265, 782, 1172, 2858. *Foraminifera*, 1185, 2558. *Infusoria*, 265, 782, 1978, 2836, 2858. *Sponges*, 1172, 1657.

RADIATES, 919, 1172, 1657.

VERTEBRATES, 258, 600, 2335. *Amphibians*, 185, 1130, 2808. *Fishes*, 185, 264, 664, 1113, 1175, 2165, 2289, 2887, 301

Mammals, 180, 610. 727, 862, 1240, 1261, 1274, 1396, 1424, 1473, 1745, 2887, 3066. *Myology*, 1191. *Osteology*, 1191, 1343, 1745. 2410, 2428. *Reptiles*, 185, 610, 660, 664, 727, 2887. *Histol. of Vert.*, 1147, 1191, 1892.

ZOOLOGY, 106, 660. 997 1418, 1859, 1876, 2124, 2294, 2660, 2676, 2578, 2884, 2897, 3005.

NORTH CAROLINA.

ANTHROPOLOGY. *Archæology*, 2637.

BOTANY, 1475.

ENTOMOLOGY, 1950. *Coleoptera*, 1950. *Lepidoptera*, 1950.

GEOLOGY, 1583, 2520, 2535.

MINERALOGY, 198, 1091, 2537, 2637.

PALÆONTOLOGY. *Invert. Palæo.*, 2520.

OHIO.

ANTHROPOLOGY, 2128. *Archæo.*, 203, 254, 358, 489, 572, 595, 622, 657, 661, 972, 1004, 1036, 1216, 1252, 1272. 1325, 1391, 1740, 1751, 1779, 1872, 1888, 1958, 2128, 2205, 2270. 2436, 2498, 2579, 3014, 3030. *Ethnol.*, 2128, 2498.

ARTICULATES. *Crustacea*, 622. ,*Bryozoa*, 2822.

BOTANY, 203, 206, 293, 495, 923, 1004, 1505, 1507, 1694, 1883, 1939, 1943, 2130. 2199, 2381, 2483, 2586, 2600, 2783, 2902, 3026, 3027, 3045. *Phæn.Bot.*, 206, 1443, 1461, 1472, 1941. *Crypt.Bot.*, 247, 247, 1300, 1941. *Diatoms*, 655. *Ferns*, 206, 247, 1443. 1527, 2600, 3027. *Hepaticæ*, 206, 247, 2600. *Lichens*, 246, 2600. *Mosses*, 206, 247, 1300, 1694, 2600. *Horticulture*, 203, 2436.

COMP. ANAT., 1651.

ENTOMOLOGY, 203, 254, 308, 489, 611, 800, 972, 1024, 1126, 1258, 1492, 1651, 1740, 1875, 2181, 2182, 2199, 2279, 2500, 2855, 2954, 3009, 3045. *Arachnida*, 1362, 2958. *Coleoptera*, 489, 669, 1024, 1272, 1350, 1556, 1649, 2157, 2272, 3042. *Lepidoptera*, 669, 1443, 1492, 1527, 1649, 1740, 2181, 2182, 2827. *Myriopoda*, 2813, 2958.

GEN. BIOL., 665, 1958, 2205, 2288, 2436, 2813.

GEN. NAT. HIST., 657, 1545, 2205.

GEOLOGY, 62, 254, 308, 489, 530, 565, 595. 661, 826, 922, 1126, 1197, 1209, 1216, 1300, 1308, 1391, 1443, 1472, 1623, 1779, 1883, 1894, 2907, 1921, 1958, 1996, 2050, 2130, 2205, 2270, 2339, 2473, 2483, 2537, 3579, 2584, 2586, 2611, 2954. 3026, 3027, 3030, 5102. *Phys. Geol.*, 46. *Strat. Geol.*, 2054.

HISTOLOGY, 1545, 2721, 2813. *Pathological and Physiological Histol.*, 1329.

INVERTEBRATES, 2822.

MICROSCOPY, 163, 257, 308, 328, 624, 655, 669, 808, 1022, 1114, 1300, 1412, 1461, 1527, 1545, 1597, 1607, 1747, 1994, 2016, 2046, 2154, 2288, 2321, 2370, 2699, 2738, 2807, 2813, 2865, 3042, 3045, 3074, 3121.

MINERALOGY, 203, 335, 358, 530, 622, 626. 757, 929, 1224, 1461, 1623, 1779, 1872, 1921, 1993, 2059, 2339, 2404, 2483, 2537, 2584, 2586, 2926, 2942, 3014, 3030. *Lithol.*, 1308, 1461, 1527. *Metall.*, 2059.

MOLLUSKS, 203, 495, 622, 626, 750, 1004, 1209, 1325, 1443, 1464, 1509, 1556, 1557, 1933, 1936, 2107, 2404, 2454, 2611, 2848, 2954, 2958, 3027.

NAT. SCI., 205, 3009.

ORNITHOLOGY, 489, 495, 720, 800, 934, 1164, 1275, 1300, 1381, 1513, 1545, 1651, 1751, 2401, 2500, 2722, 2958, 3058. *Oölogy*, 800, 934, 1258, 1267, 1336, 1381, 1545, 2722, 2895. *Taxidermy*, 293, 1275, 1276, 2895. *Palæontology*, 203, 335 358, 489, 530, 595, 622, 626, 661, 826, 929, 1216, 1224, 1252, 1272, 1300, 1325, 1472, 1509, 1694, 1740, 1836, 1872, 1888, 1894, 1907, 1921, 1933, 2050, 2339, 2404, 2436, 2454, 2503, 2579, 2584, 2722, 2822, 2832, 2837, 2848, 3014, 3026, 3027, 3030. *Invert. Palæo.*, 750, 757, 1308.

PHOTOGRAPHY, 1126.

PHYSIOLOGY, 1329, 1545.

PROTOZOA, 2813.

RADIATES, 2822, *Crinoids*, 622, *Zoöphyta*, 2822.

VERTEBRATES, 530, *Fishes*, 2640 *Mammals*, 720, 1651. *Osteol.*, 495.

ZOOLOGY, 62, 595, 1894, 1996, 2270, 3102.

OREGON.

ANTHROPOLOGY. *Archæology*, 2334, 2701.

BOTANY, 588, 1417, 1781, 2002, 2702.

ENTOMOLOGY, 1537, 2334.

GEN. NAT. HIST., 2334.

GEOLOGY, 615.

MOLLUSKS, 1137, 1537, 2701.

ORNITHOLOGY, 1237, 2334, 3052, *Oölogy*, 1537. *Taxidermy*, 1806.

PALÆONTOLOGY, 2701.

RADIATES, 2701.

VERTEBRATES. *Osteology*, 732.

ZOOLOGY, 1534, 2337.

PENNSYLVANIA.

ANTHROPOLOGY, 374, 968, 1158, 1865, 1947, 2941. *Archæo.*, 145, 240, 249, 415, 1003, 1026, 1032, 1033, 1106, 1315, 1390, 1482, 1585, 1609, 2135, 2255, 2491, 2517, 2695, 2849. *Ethnol.*, 145, 1026, 1585.

ARTICULATES. *Crustacea*, 2861. *Worms*, 2861.

BIBLIOG. OF SCI., 951, 2021,

BOTANY, 213, 309, 549, 730, 749, 918, 960, 968, 1003, 1006, 1030, 1171, 1245, 1389, 1460, 1496, 1599, 1628, 1677, 1744, 1893, 1966, 2033, 2134, 2135, 2136, 2207, 2249, 2276, 2342, 2395, 2402, 2620, 2697, 2982, 3022, 3070. *Phæn. Bot.*, 211, 422, 636, 842, 865, 977, 1026, 1124, 1292, 1479, 1621, 1633, 1648, 1654, 1717, 1764, 1862, 1863, 1901, 2043, 2265, 2437, 2536, 3134. *Crypt. Bot.*, 144, 842. *Algæ*, 1496, 1946, 3064. *Desmids*, 1946. *Diatoms*, 1367, 1946. *Ferns*, 211, 842, 1124, 1127, 1171, 1633, 1654, 1764, 1863, 2043, 2536, 3134. *Fungi*, 1367. 1496, 1937, 2648, 3134,. *Lichens*, 842, 1496. *Mosses*, 842, 2043, 2265, 3134. *Horticulture*, 1863.

COMP. ANAT., 1566, 1579.

EMBRYOLOGY, 1003, 3101.

ENTOMOLOGY, 422, 432, 433 614, 778, 865, 918, 967, 1182, 1390, 1602, 1731, 1808, 1809, 2108, 2114, 2136, 2263, 2360, 2446, 2465, 2620, 2684, 2697, 2944, 3022, 3101. *Arachnida*, 1026. *Coleoptera*, 103, 389, 434, 493, 778, 1182, 1395, 1514, 1627, 1672, 2143, 2303, 2446, 2534, 2697, 2944, 3051, 3101. *Hymenoptera*, 671. *Lepidoptera*, 103, 865, 1535, 2114, 2143 2303, 2446, 2458, 2684, 2697, 3051.

GEN. BIOL., 29, 510, 888, 1127, 1227, 1656, 1865, 1937, 1947, 2021, 2033, 2301, 2819, 3070.

GEN. NAT. HIST., 951, 1014, 1181, 1816, 2108, 2263.

GEOLOGY, 82, 249, 309, 505, 633, 852, 968, 974, 1003, 1025, 1052, 1181, 1245, 1438, 1528, 1646, 1666, 1693, 1700, 1816, 1889, 2114, 2126, 2191, 2224, 2250, 2255, 2411, 2474, 2491, 2517, 2597, 2695, 2861, 2995.

HISTOLOGY, *Pathological Histol.*, 2819.

MICROSCOPY, 129, 134, 144, 171, 241, 446, 577, 583, 636, 670. 730, 967, 974, 1001, 1103, 1160, 1369, 1390, 1460, 1566, 1824, 1865, 1882, 1946, 1947, 2126, 2134, 2135, 2144, 2174, 2243, 2252, 2301, 2371, 2387, 2402, 2408, 2482, 2509, 2515, 2516, 2648, 2819, 2890, 2891, 3022, 3101, 3135, 3136.

MINERALOGY, 82, 104, 171, 208, 230, 309, 415, 680, 852, 951, 974, 975, 977, 1003, 1014, 1025, 1032, 1033, 1034, 1150, 1290, 1367, 1438, 1515, 1581, 1599, 1609, 1621, 1633, 1642, 1646, 1666, 1677, 1700, 1816, 1889, 2022, 2135, 2164, 2224, 2250, 2254, 2255, 2282, 2411, 2465, 2517, 2594, 2597, 2695, 2849, 2957, 3015, 3022, 3028, 3128. *Lithol.*, 974, 1602. *Metall.*, 975, 2955.

MOLLUSKS, 104, 218, 918, 1032, 1225, 1646, 1666, 1893, 2114, 2135, 2255, 2276, 2465, 2805.

NAT. SCI., 888.

ORNITHOLOGY, 309, 318, 415, 594, 633, 865, 918, 978, 979, 1003, 1014, 1026, 1033, 1034, 1156, 1207, 1256, 1301, 1438, 1501, 1560, 1606, 1628, 1676, 1705, 2114, 2280, 2458, 2484, 2690, 2782, 2799, 2851, 2907, 2910, 2957, 3019, 3022, 3101, 3133. *Oölogy*, 161, 594, 979, 1003, 1014, 1207, 1256, 1560, 1804, 1816, 2114, 2305, 2457, 2458, 2577, 2782, 2910, 3133. *Taxidermy*, 2078.

PALÆONTOLOGY, 218, 1032, 1390, 1642, 1648, 2250, 2491, 2957. *Vert. Palæo.*, 633.

PHOTOGRAPHY, 2144, 2303.

PHYSIOLOGY, 1127, 1181.

PROTOZOA. *Infusoria*, 918. *Rhizopods*, 1682.

RADIATES, 2255, 2861.

VERTEBRATES, 510, 2484, 2861. *Amphibians*, 1326. *Fishes*, 633, 1705, 1947, 2255. *Mammals*, 29, 633, 1606, 1628, 2861, 3019. *Myology*, 29. *Osteology*, 29, 422, 633, 1326. *Reptiles*, 633, 1326, 1937, 2255, 2453, 2861. *Hist. of Vert.*, 1865, 1937, 2301, 2452.

ZOOLOGY, 888, 1528, 1656, 2207, 2453.

RHODE ISLAND.

ANTHROPOLOGY, 845.

ARTICULATES, 2070. *Crustacea*, 1603, 2070. *Worms*, 2070.

BOTANY, 107, 123, 184, 235, 619, 2220, *Phæn. Bot.*, 608. *Ferns*, 235, 608.

COMP. ANAT., 2100.

ENTOMOLOGY, 2220.

GEOLOGY, 496, 619, 688, 820. 845, 2325, 2789, 2916, 2973. *Physical Geol.*, 2908.

INVERTEBRATES, 1603.

MICROSCOPY, 451, 513, 546, 1532, 1798, 2234, 2129, 2213, 2771.

MINERALOGY, 184, 286, 483, 619, 688, 820, 845, 948, 1021, 1885. 2325, 2589, 2789, 2796. 2916, 2973, *Metall.*, 845,

MOLLUSKS, 483.

ORNITHOLOGY, 768, 1517, 2653, 2930. *Oölogy*, 1262, 1423, 1517. *Tax.*, 1517.

PALÆONTOLOGY, 2653, 2916.

PHYSICAL GEOG., 2908.

PHYSIOLOGY, 2100.

ZOOLOGY, 2070.

SOUTH CAROLINA.

BOTANY, 1868. *Phæn. Bot.*, 2268. *Crypt. Bot.*, 2268. *Ferns*, 2268. *Horticulture*, 2268.

GEOLOGY, 1373, 2859.

MICROSCOPY, 1495.

MOLLUSKS, 1820.

ORNITHOLOGY, 1730.

PALÆONTOLOGY, 1373, 2859.

VERTEBRATES. *Osteology*, 1768.

TENNESSEE.

ANTHROPOLOGY, *Archæo.*, 2570, 2575, 2679, 2682, 3021.

BOTANY, 266, 973, 1019, 1434, 2364. *Phæn.Bot.*, 1, 1418, 2547, *Crypt.Bot.*, 1481, 2547. *Desmids*, 2547, *Diatoms*, 2547. *Ferns*, 1, 1481, 2547. *Mosses*. 2547.

EMBRYOLOGY, 1835.

ENTOMOLOGY, 2, 3, 340, 973, 2683. *Coleoptera*, 2547, *Lepidoptera*, 2, 2547.

GEN. BIOL., 1835.

GEN. NAT. HIST., 2013, 2364, 2681.

GEOLOGY, 219, 494, 863, 864, 1434, 1589, 2178, 2328, 2364, 2468, 2680.

MICROSCOPY, 371, 516, 697, 704, 889, 2328, 2547, 2598, 2703.

MINERALOGY, 494, 1434, 1589, 1831, 2328, 2364, 2570, 2680, 2682, 3048.

MOLLUSKS, 219, 2178, 2468, 2547, 2570, 2683.

NAT. SCI., 1332.

ORNITHOLOGY, 4, 1282, 2547. *Oölogy*, 4, 1282, *Taxidermy*, 4, 1282, 1388.

PALÆONTOLOGY, 219, 494, 2328, 3021.

RADIATES, 1835.

VERTEBRATES. *Mammals*, 2328, *Reptiles*, 2328.

TEXAS.

ANTHROPOLOGY. *Archæo.*, 817, 2077, 2663

ARTICULATES. *Crustacea*, 224.

BOTANY, 1059, 1710, 2689, 2868, 3126. *Phæn.Bot.*, 2285. *Cactaceæ*, 1746. *Ferns*, 2285.

ENTOMOLOGY, 224, 303, 2689, 2868. *Coleoptera*, 1273, 2868. *Hymenoptera*, 224, 1273. *Lepidoptera*, 1273.

GEN. BIOL., 2689.

GEOLOGY, 303, 423, 1811, 2077, 2617, 2663, 2689.

MICROSCOPY, 2868.

MINERALOGY, 1059.

MOLLUSKS, 303.

ORNITHOLOGY, 303, 946, 1550, 2246, 2892. *Oölogy*, 2246.

PALÆONTOLOGY, 303, 2077, 2357, 2663, 2689.

VERTEBRATES. *Reptiles*, 1273, 2689.

UTAH.

ANTHROPOLOGY. *Archæo.*, 2511.

BOTANY, 2511.

ENTOMOLOGY, 2511.

GEN. NAT. HIST., 2511.

MOLLUSKS, 2511.

PALÆONTOLOGY, 2511.

VERMONT.

ANTHROPOLOGY. *Archæo.*, 2141, 3098.

BOTANY, 277, 1398, 1624, 2027, 2141, 2160, 2161, 2227, 2449. *Phæn.Bot.*, 353. *Crypt.Bot.*, 986. *Ferns*, 353.

ENTOMOLOGY, 1624, 2156, 2351, 2774, 3098.

GEN. NAT. HIST., 2161.

GEOLOGY, 684, 700, 797, 819, 1263, 2027, 2141, 2160, 2460, 2917, 3098.

HISTOLOGY, 2161.

MICROSCOPY, 424, 700, 1852, 2161.

MINERALOGY, 684, 819, 896, 1077, 1151, 1263, 1618, 2027, 2160, 2300, 2460, 2774, 2786, 2917, 3098.

MOLLUSKS, 1077, 2351, 2786, 3098.

NAT. SCI., 344.

ORNITHOLOGY, 896, 897, 1092, 1386, 1624, 2156, 2253, 2300, 2591. *Oölogy*, 897, 1092, 1396, 1624, 1973, 2300, 2314, 2351, 2774, 2786. *Taxidermy*, 344, 1088.

PALÆONTOLOGY, 1618, 2027, 2160, 3098.

PHYSICAL GEOG., 797.

VERTEBRATES, 3098. *Mammals*, 2300.

ZOOLOGY, 2160, 2141.

VIRGINIA.

BOTANY. 783, 949, 1356, 2933, 3094. *Phæn.Bot.*, 2501. *Diatoms*, 2152. *Ferns*, 148, 2501.

ENTOMOLOGY, 1839.

GEOLOGY, 949, 1356, 1839, 2552, 2933.

MICROSCOPY, 701, 2152.

MINERALOGY, 334, 1453, 1766, 1839, 2933.

MOLLUSKS, 783, 1839.

PALÆONTOLOGY, 949.

ZOOLOGY, 1453.

WASHINGTON TERR.

BOTANY, 734.

MOLLUSKS, 267,

ORNITHOLOGY, 241, 734. *Oölogy*, 231.

VERTEBRATES, *Mammals*, 231,

WEST VIRGINIA.

BOTANY, 1144, 2296. *Phæn. Bot.*, 2976. *Ferns*, 2976.

ENTOMOLOGY, 2037, *Lepidoptera*, 855.

GEOLOGY, 824, 2037, 2976.

MICROSCOPY, 1474.

MINERALOGY, 824.

NAT. SCI., 834.

PALÆONTOLOGY. *Invert. Palæo.*, 2976.

WISCONSIN.

ANTHROPOLOGY. *Archæo.*, 192, 562, 1772.

ARTICULATES. *Crustacea*, 429.

BOTANY, 400, 429, 677, 1572, 1611, 1638, 1844, 2085, 2361, 2487, 3092. *Ferns*, 312. *Fungi*, 429.

COMP. ANAT., 2122.

ENTOMOLOGY, 86, 429, 677, 1325, 1611, 1637, 2085, 2692, 2750, 2949. *Coleoptera*, 2103, 2267, 2750, 2949. *Lepidoptera*, 1031, 1142, 2066, 2750, 2949.

GEN. BIOL., 1611.

GEN. NAT. HIST., 2718.

GEOLOGY, 192, 502, 1101, 1489, 1611, 2085, 2718, 3092.

MICROSCOPY, 141, 379, 683, 1489, 1788, 2197, 2519, 2692.

MINERALOGY, 192, 194, 1284, 1489, 2792. *Crystallog.*, 2361,. *Lithol.*, 1489.

MOLLUSKS, 400.

NAT. SCI., 1596.

ORNITHOLOGY, 369, 429, 553, 677, 1031, 1142, 1425, 1596, 1611, 1637, 1772, 1844, 2103, 2197, 3012. *Oölogy*, 553, 1031, 1083, 1142, 1242, 1772. *Taxidermy*, 1241, 2085, 2792.

PALÆONTOLOGY, 194, 743, 1611, 3092. *Invert. Palæo.*, 2361.

PHOTOGRAPHY, 2750.

VERTEBRATES. *Fishes*, 429, 1425, 1637, 1772, 1844. *Osteology*, 1611. *Reptiles*, 1031, 1142, 1425.

ZOOLOGY, 256.

WYOMING TERR.

GEOLOGY, 877.

MINERALOGY. *Lithology*, 877.

DOMINION OF CANADA.

BRITISH COLUMBIA.

BOTANY. *Ferns*, 1546.

ONTARIO.

ANTHROPOLOGY, 226. *Archæo.*, 226, 281, 1924.

BOTANY, 336, 570, 941, 1099, 1134, 1214, 1763, 1792, 2307, 2533, 2925, 2978. *Phæn. Bot.*, 2348. *Algæ*, 2348. *Ferns*, 2348. *Fungi*, 2348, *Hepaticæ*, 2348. *Lichens*, 2348. *Mosses*, 2348.

EMBRYOLOGY, 1924.

ENTOMOLOGY, 228, 244, 294, 760, 886, 941, 1023, 1214, 1590, 1742, 1983, 2278, 2388, 2389, 2846, 3010. *Coleoptera*, 195, 244, 570, 895, 1983. *Lepidoptera*, 195, 244, 570, 895, 1023, 1983, 3010.

GEOG. DISTRIB., 281.

GEOLOGY, 226, 228, 251, 281, 1094, 1294, 1331, 1506, 2307, 2603,

MICROSCOPY, 228, 886, 2925.

MINERALOGY, 2307, 2603.

MOLLUSKS, 1294, 1455, 1924.

ORNITHOLOGY, 91, 281, 570, 606, 895, 947, 1039, 1442, 1830, 1843, 1935, 2302, 2389. *Oölogy*, 91, 895, 947, 1935, 2389. *Taxidermy*, 947.

PALÆONTOLOGY, 228, 1331, 1924, 2603, *Invert. Palæo.*, 281, 1294.

PHYSIOLOGY, 1506.

RADIATES, 1924.

VERTEBRATES, 1924. *Fishes*, 1039. *Mammals*, 895, 1039, 1442. *Reptiles*, 1015.

ZOOLOGY, 2223.

QUEBEC.

ANTHROPOLOGY, 229. *Archæo.*, 229.

ARTICULATES. *Crustacea*, 1671. *Entozoa*, 2064.

BOTANY, 443, 812, 1431, 1643, 1753, 1833, 1897, 2230, 2386, 2622, 2924. *Phæn. Bot.*, 1897, *Ferns*, 1897, 2924.

ENTOMOLOGY, 443, 645, 812, 833, 1431, 1493, 1635, 1671, 1753, 1850, 2230, 2622. *Lepidoptera*, 833, 1753.

GEN. BIOL., 1833, 2064.

GEN. NAT. HIST., 223, 673, 1431.

GEOG. DISTRIB., 2855, 2979.

GEOLOGY, 151, 229, 377, 738, 739, 868, 940, 1463, 1643, 1753, 2456, 2569, 2855.

INVERTEBRATES, 1671.

MICROSCOPY, 124, 377, 851, 1833, 1850.

MINERALOGY, 1211, 1463, 1643, 2230, 2855. *Lithol.*, 377, 868.

MOLLUSKS, 2230, 1979.

NAT. PHILOS., 1180.

ORNITHOLOGY, 209, 815, 1635, 1686, 2345, 2855. *Oölogy*, 815, 1635, 2345. *Taxidermy*, 645, 1635.

PALÆONTOLOGY, 739. *Invert. Palæo.*, 2979.

PROTOZOA, 2064, 2979. *Sponges*, 2979.

RADIATES, 2979.

VERTEBRATES, 1671.

ZOOLOGY, 645.

NEW BRUNSWICK.

ANTHROPOLOGY. *Archæo.*, 1807.

BOTANY, 498, 865. *Phæn. Bot.*, 1807. *Ferns*, 107.

ENTOMOLOGY, 1302. *Coleoptera*, 900. *Diptera*, 900. *Hymenoptera*, 900. *Lepidoptera*, 900, 1302.

GEOG. DISTRIB., 1807.

GEOLOGY, 498, 1807.

MINERALOGY, 1807.

MOLLUSKS, 1807.

NAT. SCI., 865.

PALÆONTOLOGY, 1807.

NOVA SCOTIA.

BOTANY, 470, 1665. *Phæn. Bot.*, 2585. *Algæ*, 2585. *Ferns*, 2585. *Fungi*, 2585. *Mosses*, 2585.

GEN. BIOL., 2585.

GEOLOGY, 866, 1056, 1330, 1383, 1665, 1700.

MINERALOGY, 1410.

MOLLUSKS, 931, 1549.

ORNITHOLOGY, 801, 1055.

PALÆONTOLOGY. *Invert. Palæo.*, 1383.

VERTEBRATES. *Fishes*, 1055.

SANDWICH ISLANDS.

BOTANY. *Crypt. Bot.*, 135. *Ferns*, 116, 135. *Lichens*, 116. *Mosses*, 116, 135.

MICROSCOPY, 116.

MOLLUSKS, 135.

(OMISSIONS FROM PRECEDING LIST.)

KENTUCKY.

BOTANY, 882.

ENTOMOLOGY. *Coleoptera*, 770. *Lepidoptera*, 770.

MAINE.

ENTOMOLOGY. *Lepidoptera*, 24. *Mollusks*, 24.

MASSACHUSETTS.

ORNITHOLOGY, 1780. *Oölogy*, 1780.

DIRECTORY

OF

CHEMISTS AND PHYSICISTS

OF

NORTH AMERICA.

ABBE, Prof. CLEVELAND, Army Signal Office, Washington, D. C. Physics.
ADAMS, ISAAC, jr., 6 Alexander Ave., Boston, Mass.
ADAMS, Dr. S., Prof. of Chem. and Nat. Philos., Ill. College, Jacksonville, Ill.
ADGER, JOHN B., jr., Oxford, Mass.
ADLER, J., 716 Lexington Ave., New York City.
AIKEN, W. E. A., M. D., LL.D., Prof. of Chem., Univ. of Md., Baltimore, Md.
AITKIN, ANDREW P., 6 Alexander Ave., Boston, Mass.
ALBERS, Dr. F. B., Prof. Chem., Straight Univ., New Orleans, La.
ALEXANDER, FLORIAN, Passaic Chemical Works, Newark, N.J.
ALLEN, J. M., Prof. Chem., Eureka Coll., Eureka, Ill.
ALLEN, L., Providence, R. I.
ALLEN, O. D., Prof. Analyt. Chem., Sheffield Scientific School, New Haven, Conn.
ALLEN, ZACHARIAH, Providence, R. I.
ALLISON, E. H., Eaton, O.
ALLYN, Prof. JOSEPH G., St. Genevieve, Md.
AMEND, B. G., Pharmaceutist, 205 Third Ave., New York City.
AM ENDE, C. G., Hoboken, N. J.
APPLETON, JOHN H., Prof. of Chem., Brown Univ., Providence, R. I.
ARMSBY, H. P., Box 48, New Haven, Conn.
ARNOLD, Dr. J. W. S., 39 W. 32nd St., New York City.
ASHBURNER, CHAS. A., 9 Woodland Terrace, Phila., Pa. Physics.
ASHBURNER, WM., 240 Montgomery St., San Francisco, Cal.
ATWATER, W. O., Ph.D., Prof. of Chem., Wesleyan Univ., Middletown, Conn.

AUBERT, A. B., B. S., Prof. of Chem., Agricultural Coll., Orono, Me.
AUSTEN, PETER TOWNSEND, Ph.D., F. C. S., Box 130 Stapleton, Staten Island, N. Y.
AUSTIN, C. F., Closter, N. J. Chem.
AVERY, C., LL.D., Prof. Chem., N. Y. Med. Coll., N. Y.
BABCOCK, JAMES F., Prof. of Chem., Coll. of Pharmacy, Boston, Mass.
BACON, Dr. J. Prof. Chem., Harvard Med. Coll., Boston, Mass.
BAER, O. P., M. D., Richmond, Ind. Chem.
BAILEY, GILBERT E., Prof. Analyt. Chem., Univ. Nebraska, Lincoln, Neb.
BAILEY, L. W., Prof. Chem., Univ. Frederickton, N. B.
BAKER, HAYDEN, 111 So. Third St., Williamsburg, L. I., N.Y.
BAKER, THOS. R., M. S., Ph.D., Millersville, Pa. Chem., Physics.
BALCH, DAVID, M., Salem, Mass. Consulting Chemist.
BALENTINE, WALTER, Middletown, Conn.
BAPTIC, G., A. M., M. D., Ottawa, Can. Chem., Physics.
BARDEEN, Prof. F. L., M. D., Ann Arbor, Mich. Chem.
BARKER, G. F., Prof. Chem., Univ. Pennsylvania, Phila., Pa.
BARTLETT, ARTHUR K., Battle Creek, Mich. Physics.
BARTLETT, N. GRAY, Ph.D., Prof. Chem., Coll. of Pharmacy, cor. of 22nd St., and Indiana Ave., Chicago, Ill.
BARTLETT, WILLARD, 43 Pine St., N. Y. City.
BARTLEY, E. H., Prof. Chem., Swathmore Coll., Swathmore, Pa.
BARTOL, GEORGE, S. B., Lancaster, Mass. Chem., Physics.
BARTON, F. P., Sudbury, Mass.
BATES, JOSEPH, M. D., Lebanon Springs, N. Y. Chem.
BATTERSHALL, JESSE P., Ph.D., 26 Pine St., N. York City.
BAUMGARTEN, A., Montreal, Can.
BAUMGARTEN, F. M., 600 Broadway, Milwaukee, Wis.
BAXLEY, WM. T., 125 Third St., Oakland, Cal. Chem.
BAYLES, JAMES C., 84 Reade St., N. Y. City.
BEAL, WM., Murphey, N. C. Chem.
BECKER, G. F., Ph.D., Univ. Cal., Oakland, Cal. Chem. Physics.
Bedford, Prof. P. W., Box 1738, New York City. Inorg. Chem.
BEHR, ARNO, Jersey City, N. J.
BELANTI, WALTER, Waterville, Me.
BELCHER, G. W., St. Louis, Mo.
BELL, ROBERT, M. D., Montreal, Can. Inorg. Chem.

BENJAMIN, M., Ph.B., Analytical Chemist, 10 Barclay St., N. Y. City.
BERGEN, J. G., jr., A. M., Deerfield, Mass. Chem.
BISCOE, PROF. T. D., Marietta, O. Physics.
BISHOP, CHAS. L., Jamestown, N. Y. Physics.
BLACKHAM, GEO. E., M. D., Dunkirk, N. Y. Physics.
BLACKIE, GEO. S., A. M., M. D., Ph.D., Prof. Chem., Nashville Med. Coll., Nashville, Tenn.
BLAIR, Prof. ANDREW A., 2123 Olive St., St. Louis, Mo.
BLAIR, THOS. S., Pittsburg, Pa.
BLAKE, ELI W., New Haven, Conn.
BLAKE, E. W., Hazard Prof. Prof. of Physics, Brown Univ. Providence, R. I.
BLAKE, F., jr., Newton Lower Falls, Mass.
BLAKE, F. C., Mansfield Valley, Alleghany Co., Pa. Chem. Physics.
BLAKE, JANES D., Chemist, Bush St., San Francisco, Cal.
BLAKE, JOHN M., New Haven, Conn. Chem.
BLAKE, T. A., Bush St., San Francisco, Cal.
BLAKE, WM. P., New Haven Conn.
BLANPIED, B. T., Prof. of Chem., Hanover, N. H.
BODLEY, A. R., M. D., Angola, Ind. Chem.
BODLEY, RACHEL L., Prof. Chem. Women's Med. Coll. of Pennsylvania, Phila., Pa.
BOERNER, CHAS. G., Vevay, Ind. Chem. Physics.
BOGARDUS, E. H., Rutger's Coll., New Brusnwick, N. J.
BOGUE, OLIVER H., Instructor in Chem., Earlham Coll., Richmond, Ind.
BOLTON, H. CARRINGTON, Ph.D., Prof. of Chem., Trinity Coll., Hartford, Conn.
BOLTON, JOHN, Teacher of Chem., Physics, etc., West High School, Cleveland, O.
BOLTON, W. P., Liberty Square, Pa. Chem., Phys.
BOND, JOSIAH, jr., Kenosha, Wis.
BOND, SHEDE C. Claryville, Mo. Phys.
BOOST, ALEXANDER, Hartford, Conn. Chem.
BOOTH, JAMES C., Prof. Chem., U. S. Mint, Phila., Pa.
BORDEN, SPENCER, Fall River, Mass.
BOURGOUGNON, A., 91 Duane St., New York City.
BOURNE, FRANK P., Inst. in Analyt. Chem., Brown Univ., Providence, R. I.
BOUVE, THOS. T., 18 Post Office Square, Boston, Mass.
BOWEN, Prof. H. C., Columbia Coll., New York City. Chem., Phys.

BOWER, A. W., Prof. Physics, Rensselaer Polytechnic Institute, Troy, N. J.
BOURON, W. M., F. C. S., 426 Walnut St., Phila. Pa.
BRACE DE WITT B., Lockport, N. Y. Chem.
BRACKETT, C. F., Prof. Physics, Coll. of New Jersey, Princeton, N. J.
BRACKETT, SOLOMON H., A.M., St. Johnsbury Acad., St. Johnsbury, Vt. Physics.
BRAGG, CHAS. S., Braggville, Mass. Chem.
BRAGG, E. B., 3 Park Place, New York City.
BREIDENBAUGH, Prof. E. S., Prof. Chem. and Min., Penn. College, Gettysburg, Pa.
BRENEMAN, A. A., Ass't Prof. and Lecturer, Indust. Chem., Cornell Univ., Ithaca, N. Y.
BREWER, L. H., Prof. Chem. and Nat. Hist., Hanover, N. H.
BRIDGES, ROB'T, M. D., Prof. Chem., Phila. Coll. Pharm., 119 So. 20th St., Phila., Pa.
BRINLEY, CHAS. A., Germantown, Phila. Pa.
BRITTON, N. L., New Dorp, Staten Island, N. Y. Inorg. Chem.
BRITTON, J. BLODGET, 339 Walnut St., Phila., Pa.
BROCKLESBY, JOHN, LL.D., Prof. Nat. Philos. and Astron., Trinity Coll., Hartford, Conn.
BROWN, Rev. JOHN J., Prof. Chem. and Physics, Syracuse, N. Y.
BROWN, WM. G. E., Tenn. Univ. Nashville, Tenn.
BROWNELL, W. A., A. M., Ph.D., Syracuse, N. Y. Chem.
BRUCKUER, WM. H., Ph.D., Monroe, Mich.
BRUSH, Prof. GEO. J., Sheffield Scientific School, Yale Coll. New Haven, Conn. Chem.
BUCK, C. E., Wilmington, Del.
BUCK, S. M., E. M., Coalburg, W. Va.
BUCKINGHAM, P. P., Sup't New Haven, Chemical Co., 221 Chapel St.. New Haven, Conn.
BUDD, C. A., M. D., Prof. Nat. Sci. and Chem., Franklin and Marshall Coll., Lancaster, Pa.
BULLOCK, CHAS., 528, Arch St. Phila., Pa. Chem.
BURNSTINE, ISADORE, Detroit, Mich. Chem.
BURTON, B. S., Prof. Gen. and Agric. Chem., East Tenn. Univ., and State Indust. Coll., Knoxville, Tenn.
BUSHEE, Prof. JAMES, Worcester, Mass. Phys., Chem.
BUTLER, C. H., W. 1 st., St., Oswego, N. Y. Chem.
BUTLER, FRANK A., 314 Union St., Brooklyn, N. Y. Chem.
CABOT, S. jr., Boston, Mass.

CADY. L. B., E.M., Ass't in Metallurgy, Sch. of Mines., Columbia Coll., N. Y. City.
CAIRNS, F. A., Columbia Coll., N. Y. City.
CALDER, EDWIN E., Brown Univ., Providence, R. I. Chem.
CALDWELL, GEO. C., Prof. of Agric. and Analyt. Chem., Ithaca, N. Y.
CAMPBELL, J. L., Prof. Chem., Washington and Lee Univ., Lexington, Va.
CAMPBELL, DOUGLASS, 262 Broadway, N. Y. City.
CARHART, H. S., Prof. Physics and Chem., N. W. Univ., Evanston, Ill.
CARMICAÆL, H., Ph.D., Bowdoin Coll., Brunswick, Me.
CARPENTER, H. F., 29 & 31 Page St., Providence, R. I. Chem.
CARPENTER, WM. B., Lansing, Kans. Physics.
CARSON, J. P., E.M., 80 Broadway, Room 53, N. Y. City.
CASSELS, J. L., Prof. Chem. Western Reserve Coll., Hudson, O.
CASTIN, M. P., Prof. Chem., St. John's Coll., Fordham, N. Y.
CASWELL, J. H., E.M., 11 W. 48th St., New York City.
CAZIN, F., M. E., Denver, Colo.
CHAMBERLAIN, C. W., M. D., Hartford, Conn.
CHAMBERLIN, S. N., Daytona, Fla. Chem.
CHAN, THEO. R., Detroit, Mich.
CHANCE, H. Martyn, 2433 Fairmont Ave., Phila., Pa. Physics.
CHANDLER, C. F., Prof. of Chem., Columbia Coll.; Coll. of Physicians and Surgeons; N. Y. Coll. Pharm., N. Y. City.
CHANDLER, C. H., Prof. Chem., Antioch Coll., Yellow Springs, O.
CHANDLER, W. H., Prof. of Chem., Lehigh Univ., Bethlehem, Pa.
CHAPELLE, E. DE LA, La Bastic Glass Works, South Brooklyn, N. Y.
CHAPMAN, Prof. E. J., Univ. Coll., Toronto, Can.
CHAPMAN, W. B., M. D., Prof. Pharm., Cincinnati Coll. Pharmacy, Cincinnati, O.
CHARLTON, C. T., Savannah, Ga.
CHASE, ALONZO, Albany, N. Y.
CHASE, Prof. FRED A, Fisk Univ., Nashville, Tenn. Physics.
CHASE, G. J., Prof. Chem., Providence, R. I.
CHASE, HARVEY, Haverhill, Mass.
CHASE, THEODORE R., Detroit, Mich. Chem., Phys.
CHATARD, T. M., S. B., Baltimore, Md.

CHAUVENET, R., St. Louis, Md.
CHENEY, MARGARET S., Boston, Mass.
CHESTER, ALBERT H., Prof. of Chem., Clinton, N. Y.
CHEVALIER, JOSEPH, Box 802, Ithaca, N. Y. Chem.
CHEVER, J. C. F., Care Page, Kidder & Fletcher, 10 Warren St., N. Y. City.
CHITTENDEN, Prof. R. H., Yale College, New Haven, Conn.
CHRISTY, S. B., Ph.B., Univ. of Cal., Berkeley, Cal. Chem.
CLAUCH, J. A., E. M., Tarrytown, N. Y.
CLARK, H. A., M. D., Prof. Chem. Med. Coll., Cincinnati, O.
CLARK, J. A., Lostant, Ill. Chem.
CLARK, M. V. B., Prof. Applied Chem., Baldwin Univ., Berea, O.
CLARK, W. S., Amherst Coll., Amherst, Mass.
CLARKE, Prof. F. W., Univ. Cincinnati, O. Chem.
CLARKSON, J. A., M. D., Ph.D., Analyt. Chem., 43 No. Calvert St., Baltimore, Md.
CLARKSON, J., Amesbury, Mass.
CLAUDE, ABRAM, Prof. Chem., St. John's Coll., Annapolis, Md.
CLEVINGER, S. V., M. D., Chicago, Ill. Phys.
CLIFFORD, F. S., Boston, Mass. Chem., Phys.
COCHRAN, DAVID H., Pres. Polytechnic Inst., Brooklyn, N. Y.
COFFINBERRY, W. L., Grand Rapids, Mich. Phys.
COLBY, CHAS. E., Sch. of Mines, Columbia Coll., N. Y. City.
COLBY, EDW. P., M. D., Prof. of Med. Chem., Boston University School of Medicine, Boston, Mass.
COLLIER, GEO. H., Willamette Univ., Salem, Oregon. Chem.
COLLIER, HIRAM, Prof. Chem. and Physics, Univ. of Neb., Lincoln, Neb.
COLLIER, PETER, Ph.D., Dep't of Agric., Washington, D. C. Chem.
COLEMAN, H. G., Prof. of Chem., Kalamazoo Coll., Kalamazoo, Mich.
CONLEY, J. D., Prof. of Chem., Blackburn, Univ., Carlinville, Ill.
COOK, G. H., Ph.D., LL.D., Prof. Chem., Rutgers Scientific School, New Brunswick, N. J.
COOKE, Prof. J. P., jr. Harvard Univ., Cambridge, Mass.
COOKE, WM. E., E. Fairmont, Cincinnati, O. Chem.
COON, HENRY C., M. D., Prof. Physics and Chem., Alfred Centre, N. Y.
CORRIGAN, S. J., St. Paul, Minn. Chem., Phys.

COWLES, EDWARD, Sheffield, Ph.D., Farmington, Conn. Chem.
COX, E. T., State Geologist, Indianapolis, Ind.
CRAFTS, J. M., Mass. Inst. Technol., Boston, Mass.
CRAIG, B. P., M. D., U. S. Army Med. Mus., Washington, D. C.
CRAIK, Dr. B., Prof. Chem. Med. Faculty McGill Coll. Montreal. Can.
CRAVEN, F. S., M.E., Ass't J. C. Green School of Science Princeton, N. J.
CREHORE, J. D., A.M. 458 Prospect St., Cleveland, O. Phys.
CRESSON, C. M., Analyt. Chem., Fourth and Walnut Sts. Phila., Pa.
CROFT, Prof. H. H., Vice Chancellor of Univ., Coll. of Toronto, Toronto, Can.
CROOKE, J. J., 163 Mulberry St., New York City. Chem.
CROSS, CHAS. R., Prof. of Physics, Mass. Inst. of Technol., Boston, Mass.
CROWELL, A. F., Woods Hole, Mass.
CRUMP, M. H., Ogden Coll., Bowling Green, Kentucky.
CULIN, ROBERT S., Moorestown, N. J. Chem., Phys.
CURTIS, JOHN, 40 Bassett St., Providence, R. I.
CURTISS, L. R., Mendota, Ill. Phys.
CUTTER, W. E., Chemist, Worcester, Mass.
DABNEY, CHAS. W., Charlotteville, Va.
DAGGET, A., Pharmaceutist and Chemist, 158 Chapel St., New Haven, Conn.
DAGGETT, ELLSWORTH, M.E., Salt Lake City, Utah.
DALTON, Dr. J. C., Prof. Physiol., Coll. Physicians and Surgeons, N. Y. City.
DANA, EDWARD S., Yale College, New Haven, Conn.
DANIELLS, W. W., M. S., Prof. of Chem., Univ. of Wisconsin, Madison, Wis.
DARLING, B. B., Box 322, Providence, R. I.
DASCOMB, Dr. J., Prof. Chem., Oberlin Coll., Oberlin, O.
DAVENPORT, R., M. E., Midvale Steel Works, (near) Phila., Pa.
DAVIDSON, GEORGE, Pres. Acad. Nat. Sci., San Francisco, Cal. Phys.
DAVIDSON, H. M., Ogdensburg, N. Y. Chem.
DAVIES, JOHN E., A. M., M. D., Box 1106, Madison, Wis. Phys.
DAY, AUSTIN G., 120 Broadway, N. Y. City.
DAY, WALTER D. F., 301 Mott St., N. Y. City.

DEAN, D. V., M. D., St. Louis, Mo. Chem.
DEECKE, THEODORE, N. Y. State Asylum, Utica, N. Y.
DEELEY, ROBERT, 225 W. 25th St., N. Y. City.
DEGARMO, JAS. M., Rhinebeck, Dutchess Co., N. Y. Phys.
DEGENHARDT, F. A. C., 65 Ross St., Brooklyn, E. D., N. Y.
DEIL, Prof. LOUIS, School of Pharmacy, Louisville, Ky.
DELAFONTAINE, Prof. M., Ph.D., 20 No. Sangamon St., Chicago, Ill.
DELAND, L. J., Manufacturing Chemist, Freeport, N. Y.
DICKINSON, E. N., Staats Zeitung Building, N. Y. City.
DOLBEAR, A. E., College Hill, Mass. Phys.
DONNER, J. O., So. 9th St., Brooklyn, E. D., N. Y.
DONNER, OSCAR W., So. 9th St., Brooklyn, E. D., N. Y.
DOREMUS, C. A., M. D., Ph.D., Bellevue Hospital, Med. Coll., N. Y. City.
DOREMUS, Dr. R. O., Prof. Chem., Coll. of the City of New York.
DOUGLASS, JAMES, jr., Quebec, Can.
DOUGLASS, Dr. S. H., Ann Arbor, Mich.
DRAPER, Dr. J. C., Prof. Nat. Hist. and Physics, Coll. of the City of N. Y.
DROWN, Dr. T. M.. Prof. Chem., Lafayette Coll., Easton, Pa.
DRYER, CHAS. R., M. D., Fort Wayne, Ind. Chem.
DUDLEY, Dr. C. B., Altoona, Pa.
DUFFIELD, Dr. S. P., Prof. Chem., Med. Coll., Detroit, Mich.
DUNNINGTON, F. P., B. Sc., Adjunct Prof. Analyt. Chem., University of Virginia, Albemarle Co., Va.
DUPRE, W., Prof. Nat. Sci., Wofford Coll., Spartanburg C. H., S. C.
DUTTON, CAPT. C. E., U. S. A., Ordnance Dep't, Washington, D. C.
DWIGHT, CHAS. E., So. Abington, Mass. Analyt. Chem.
DWIGHT, J. W., Esq., Pres. New Haven Chemical Co., 221 Chapel St., New Haven, Conn.
EAMES, Dr. C. J., 26 Pine St., N. Y. City.
EASTWICK, E. P., 87 Wall St., N. Y. City.
EASTWOOD, J. F., Bethany, W. Va.
EATON, Dr. A. K., Brooklyn, N. Y.
EATON, DARWIN G., Ph.D., Packer Inst., Brooklyn, N. Y Chem.
EATON, Dr. JAS. H., Prof. Chem., Beloit Coll., Beloit, Wis.
EATON, JAMES R., Prof. of Inorg. Chem. and Physics, William Jewell Coll., Liberty, Mo.
EATON, S. C., 30 Wall St., N. Y. City.

EATON, T. J., M. D., Ph.D., Kansas City, Mo. Chem.
EBERT, ALBERT E., 584 State St., Chicago, Ill. Chem., Pharm.
EDGECOMB, D. W., Washington, Conn.
EDISON, THOS. A., Menloe Park, N. J. Electrician.
EDMAN, J. A., Meadow Valley, Cal. Chem.
EGLESTON, Dr. T., School of Mines, Columbia Coll. N. Y. City.
EINHORN, Dr. ALFRED, 149 E. 61st St., N. Y. City.
ELDER, F. H., Care Havemeyer & Elder, Wall St., N. Y. City.
ELDER, GEO., 19 W. 48th St., N. Y. City.
ELDER, WM., Prof. of Chem. and Nat. Hist., Colby Univ., Waterville, Me.
ELIOT, Dr. C. W., Pres. Harvard Coll., Cambridge, Mass.
ELLIOT, ARTHUR H., 36 New St., New York City.
ELLIOTT, JNO. B., M. D., Univ. of the South, Sewanee, Tenn. Chem.
ELLIS, W. H., Toronto, Can.
ELMENHORST, W. R., Care of Matthiessen & Wiechers, Jersey City, N. J.
ELSNER, JOHN, M. D., Denver, Colo. Chem., Phys.
EMERY, Dr. R., Prof. Chem. Genessee Coll., Lima, N. Y
EMERSON, CHAS. FRANKLIN, Prof. of Nat. Philos., Dartmouth Coll., Hanover, N. H.
ENDEMANN, Dr. H., 128 Worth St., N. Y. City.
ENDLICH, Dr. F. M., Smithsonian Inst., Washington, D. C.
ENGELHARDT, F. E., Syracuse, N. Y. Chem.
ENSIGN, WM. O., M. D., Rutland, Ill. Chem.
FAIRBANKS, Rev. HENRY, St. Johnsburg, Vt. Phys.
FALKE, WILLIAM, 141 E. 8th St., New York City.
FARRAR, C. S., Prof. of Chem., Milwaukee Coll., Milwaukee, Wis.
FAY, Dr. THEODORE, Prof. of Chem., Coll. of Pharmacy, St. Louis, Mo.
FENNEL, ADOLPHUS, Cincinnati, O. Chem.
FERNALD, M. C., Prof. Math. and Physics, State Coll., Orono, Me.
FESQUET, ADOLPHE A., 1322 Marshall St., Phila., Pa.
FISHER, DAVENPORT, New York City.
FISHER, R. A., Sch. of Mines, Columbia Coll., N. Y. City.
FISKE, D. M., Prof. Chem. and Nat. Hist., Hillsdale Coll., Hillsdale, Mich.

FLOYD, F. W., E. M., Ass't in Metallurgy, Sch. of Mines, Columbia Coll., N. Y. City.
FONTAINE, Prof. W. M., University of Virginia, Albemarle Co., Va. Agric. Chem.
FORBES, FRANCIS, Southeast corner 26th St. and Madison Ave., N. Y. City.
FOYE, J. C., Prof. Chem. and Physics, Lawrence University, Appleton, Wis.
FRANCIS, GEORGE E., M. D., Worcester, Mass. Phys.
FRANKLIN, WM. E., M. D., La Grange, Tenn. Chem.
FRAZER, PERSIFOR, jr., Ass't Geological Surv., 917 Clinton St., Phila., Pa. Chem.
FRIES, ALEX. P., St. Nicholas, Fla. Chem., Phys.
FRISTOE, E. T., LL.D., Prof. of Chem. and Nat. Sci., Columbia Coll., Washington, D. C.
FROEBEL, C., Prof. of Chem., Coll. of Pharmacy, New York City.
FROHWEIN, THEOBALD, 218 Stanton St., N. Y. City. Chem., Pharm.
FULTON, Prof. ROBERT B., Oxford, Miss. Phys.
GALLATIN, Dr. A. H., 10 E. 17th St., N. Y. City.
GALLOWAY, G. W., jr., M. D., 10 E. 17th St., N. Y. City.
GANDOLPHO, JOSEPH, Care Havemeyer & Co., N. 2nd St., Brooklyn E. D., N. Y.
GARLAND, L. C., A. M., LL.D., Prof. of Phys. and Astron., Vanderbilt Univ., Nashville, Tenn.
GARRETT, ELWOOD, Wilmington, Del.
GARRISON, Prof. H. D., Chicago Coll. of Pharm., Chicago, Ill.
GARVER, M. M., Prof. of Nat. Sci., Mercersburg, Pa. Phys.
GEHREN, H. von, Jersey City, N. J.
GEIGER, H. R., Prof. Nat. Sci., Wittenberg Coll., Springfield, O.
GENTH. F. A., West Phila. Chem.
GEORGE, T. C., Univ. of the Pacific, Box 242 San José, Cal. Chem.
GESNER, G. W., 81 John St., N. Y. City.
GESNER, WM., M. D., Birmingham, Ala. Chem.
GEYER, WM. E., Stevens Inst., Hoboken, N. J.
GIBBS, WOLCOTT, Cambridge, Mass. Chem., Phys.
GIFFORD, WM. E., Box 4867, New York City.
GILBERT, D. W, Keene, N. H. Phys.
GILL, WM. L., Lancaster, Pa. Chem.

GILLET, J. A., Prof. Physics, Normal Coll., 68th St. and 4th Ave., N. Y. City.
GOESSMAN, CHAS. ANTHONY, Ph.D., Prof. Chem., Amherst, Mass.
GOLDMARK, J., Brooklyn, N. Y.
GOLDSCHMIDT, S. A., Ph.D., 59 & 61 Liberty St., N. Y. City. Chem.
GOLDSMITH, E., 720 W. 9th St., Phila., Pa.
GOODYEAR, W. A., San Francisco, Cal.
GORTON, DAVID A., M. D., 291 Broadway, N. Y. City. Chem., Phys.
GRANDY, Prof. C. D., Chapel Hill, N. C. Chem.
GRATCAP, L. B., Ph.D., Snug Harbor, Staten Island, N. Y.
GRAVES, W. B., Prof. Physics, Mass. Agric. Coll., Amherst, Mass.
GRAY, J. R., Mining Exchange, St. Louis, Mo.
GREEN, HENRY A., Atco, N. J. Chem.
GREEN, J. C., M. D., 124 Swan St., Buffalo, N. Y. Chem.
GREEN, Dr. T., Prof. Chem., Lafayette Coll., Easton, Pa.
GREGG, W. H., M. D., Elmira, N. Y. Analyt. Chem.
GRIFFIN, ROGER B., Middletown, Conn.
GROFF, Prof. GEO. G., M. D., Westchester, Pa. Chem.
GRUND, F. A., 106 Wall St., Room 4, N. Y. City.
HAANEL, E., Ph.D., Cobourg, Ontario, Can. Phys., Chem.
HABIRSHAW, FRANK, 113 Maiden Lane, N. Y. City.
HABIRSHAW, FRED, 6 W. 48th St., N. Y. City.
HABIRSHAW, JOHN, 6 W. 48th St., N. Y. City.
HABIRSHAW, W. M., 36 New St., N. Y. City.
HADLEY, Dr. G., Prof. Chem., Univ. of Buffalo, 1355 Main St., Buffalo, N. Y.
HAGUE, J. D., San Francisco, Cal.
HAINES, Dr. W. S., Prof. Org. Chem., Northwestern Univ., Chicago, Ill.
HALE, ALBERT W., M. E., 71 Broadway, N. Y. City.
HALL, JOSEPH, Prof. Phys. Sci., Hartford, Conn.
HALL, L. B., Prof. Chem., Dartmouth Coll., Hanover, N. H.
HALLGARTEN, ADOLPH, 68 William St., N. Y. City.
HALLOCK, EDWARD J., Columbia Coll., N. Y. City.
HAMILTON, HUGH, M. D., B. S., Harrisburg, Pa. Chem.
HAMLIN, A. C., M. D., Bangor, Me. Chem.
HARDING, AUG., Ass't in Chem., Univ. of Cal., Berkeley, Cal.
HARDY, W. B., Prof. Chem. and Phys., Santa Rosa, Cal.
HARNISH, H. H., 113 Water St., New York City.

HARRINGTON, B. J., A. B., Ph.D., McGill Coll., Montreal, Can. Chem.
HARRINGTON, G., Sudbury, Mass.
HARRIS, E. P., Prof. Chem., Amherst Coll., Amherst, Mass.
HARRIS, J. M., Prof. Nat. Philos. and Chem., Furman Univ., Greenville, S. C.
HART, EDWARD, S. B., Ass't Prof. of Chem., Lafayette Coll., Easton, Pa.
HART, S. B., Fellow in Chem., Johns Hopkins Univ., Baltimore, Md.
HARVEY, Prof. F. L., Ark. Indust. Univ., Fayetteville, Ark. Chem.
HASENCLEVER, MAURICE, Pacific Mills, Lawrence, Mass.
HASSON, W. F. C., U. S. N. Acad., Annapolis, Md. Phys.
HASTINGS, CHAS. S., Ph.D., Johns Hopkins Univ., Baltimore, Md. Phys.
HATFIELD, MARCUS P., A. M., M. D., Chicago, Ill. Toxicological Chem.
HAVEMEYER, CHAS. W., Care of Havemeyer Bro. & Co., Greenpoint, L. I., N. Y.
HAVEMEYER, HENRY, 87 Wall St., N. Y. City.
HAVEMEYER, HENRY O., 98 Wall St., N. Y. City.
HAVEMEYER, THEODORE A., 98 Wall St., N. Y. City.
HAWES, G. W., Sheffield Sci. School, New Haven, Conn.
HAYES, A. A., Brookline, Mass.
HAYES, S. DANA, State Assayer, 4 State St., Boston, Mass.
HAYNES, ARTHUR E, Prof. Math. and Phys., Hillsdale Coll., Hillsdale, Mich.
HAZARD, R. G., 2nd, Peace Dale, R. I. Chem.
HAZELTINE, GILBERT W., Jamestown, N. J.
HEDRICK, Dr. B. S., Patent Office, Washington, D. C.
HELLER, FRED, Box 216, Newark, N. J.
HENCK, JOHN B., jr., Mass. Inst. Tech., Boston, Mass. Phys.
HENES, W. F., 1620 Third Ave., cor. 91st St., N. Y. City.
HERRESHOFF, J. B. F., 99 Maiden Lane, N. Y. City.
HERRICK, Prof. W. H., Iowa Coll., Grinnell, Iowa. Chem.
HEWSTON, Gen. J. 416 Montgomery St., San Francisco, Cal. Chem.
HEYES, THOMAS, Toronto, Can.
HIBBARD, WM. E., 1 Wall St., N. Y. City. Chem.
HICKS, L. E., Prof. Nat. Sci , Denison Univ., Granville, O.
HIGLEY, W. K., Box 1229, Ann Arbor, Mich. Chem.
HILGARD, E. W., Prof. Univ. of Cal., Berkeley, Cal.
HILL, HENRY B., Harvard Univ., Cambridge, Mass.

HILL, Prof. N. P., Black Hawk, Colo.
HILL, WALTER N., U. S. Torpedo Station, Newport, R. I.
HILLS, WM. B., Cambridge, Mass.
HIMES, Dr. C. F., Prof. Nat. Sci., Dickinson Coll., Carlisle, Pa.
HINDES, JOSEPH, cor. 1st & So. 4th Sts., Brooklyn, N. Y.
HINDS, J. I. D., A. M., C. E., Prof. of Chem., Cumberland Univ., Lebanon, Tenn.
HINMANN, C. W., 11 Montgomery Place, Boston, Mass.
HINRICHS, Prof. G., M. D., Iowa City, Iowa. Phys.
HINSDALE, Rev. ROBERT G., Geneva, N. Y. Chem.
HITCHCOCK, Dr. C. H., Dartmouth Coll., Hanover, N. H.
HITCHCOCK, Prof. R., F. R. C. S., 53 Maiden Lane, N. Y. City. Chem.
HODGE, JAS. M., Mass. Inst. Tech., Boston, Mass.
HODGES, H. B., Ass't in Chem., Harvard Univ., Cambridge, Mass.
HODGES, R. C., Detroit and Lake Superior Copper Co., Detroit, Mich.
HOFFMAN, FRED, Ph.D., 797 Sixth Ave., N. Y. City.
HOFFMAN, F., Montreal, Can.
HOLBROOK, FRANCIS N., Columbia Coll., N. Y. City.
HOLBROOK, J. J., Keene, N. H. Chem., Phys.
HOLLAND, Prof. J. W., M. D., Louisville, Ky. Phys.
HOLLICK, ARTHUR, Box 105, New Brighton, Staten Island, N. Y.
HOLLY, JOHN J., 62 Beaver St., N. Y. City.
HOLMAN, GEO. M., B. S., Fitchburg, Mass. Chem.
HOLMAN, S. W., S. B., Framingham, Mass. Phys.
HOLMES, MARY E., Box 485, Rockford, Ill.
HOLT, HENRY, 12 E. 23rd St., N. Y. City.
HOMER, CHAS. S., 323 Pearl St., N. Y. City.
HOPKINS, F. V., Prof. Chem., La. State Univ., Baton Rouge, La.
HORSFORD, E. N., Cambridge, Mass.
HOTZE, C. L, Cleveland, O. Phys.
HOUGH, Dr. J., B., Prof. Chem., Miami Med. Coll., Cincinnati, O.
HOUSTON, E. J., Central High School, Phila., Pa.
HOUSTON, GEO. M., Harrisonville, Mo. Chem.
HOVEY, EDMUND O., Prof. Chem., Wabash Coll., Crawfordsville, Ind.
HOW, Dr. HENRY, Prof. Chem., Kings Coll., Windsor, N. S.
HOWARD, A. T., Box 1952, Boston, Mass.

HOWARD, J., East Orange, N. J.
HOYT, D. B., Rockport, Mass. Chem.
HOYT, W. L., E. M., E. Orange, N. J.
HUBBARD, Dr. O. P., Prof. of Chem., Med. Dep't, Dartmouth Coll., Hanover, N. H.
HUMPHREY, H. C., 113 Walnut St., Phila., Pa.
HUNGERFORD, Rev. EDWARD, Meriden, Conn.
HUNT, F. F., E. M., Quebec, Can.
HUNT, GIDEON, Plainfield, Hendricks Co., Ind. Chem.
HUNT, Dr. T. STERRY, Montreal, Can.
HURD, ALBERT, A. M., Prof. Chem., Galesburg, Ill.
HUSSEY, GEO. B., Box 174, East Orange, N. J. Chem.
HYATT, Prof. ALPHEUS, Mass. Inst. Tech., Boston, Mass.
IHLSENG, M. C., E. M., Ass't in Physics, Columbia College, N. Y. City.
ILES, M. W., Ph.B., Fellow Johns Hopkins Univ., Baltimore, Md.
IRVING, Prof. ROLAND D., Madison, Wis.
JACKSON, C. L., Harvard Univ., Cambridge, Mass.
JACKSON, Dr. CHAS. T., Boston, Mass.
JACKSON, O. R., Ass't in Chem., Harvard Univ., Cambridge, Mass.
JACQUES, WILLIAM W., S. B., Johns Hopkins Univ., Baltimore, Md. Physics.
JAMES, HENRY, M. D., Belleville, Ont., Can. Chem.
JAMESON, HENRY, M. D., Prof. Chem. and Toxicology, Med. Coll. of Indiana, Indianapolis, Ind. Chem., Micro-Chem.
JENCKS, F. T., 283 Westminster St., Providence, R. I.
JENKINS, THOS. E., Pharmaceutist, Louisville, Ky.
JENNINGS, EDWARD P., Instructor in Chem., Cornell Univ., Ithaca, N.Y.
JEWELL, THEODORE F., Washington, D. C. Inorg. Chem., Phys.
JEWETT, HENRY S., A. M., M. D., Dayton, O. Chem.
JOHNSON, A. B., Utica, N. Y. Chem.
JOHNSON, OTIS C., Ass't in Chem. Laboratory, Univ. of Mich. Ann Arbor, Mich.
JOHNSON, S. W., Prof. Analyt. and Agric. Chem., Yale Coll., New Haven, Conn.
JOHNSTON, JOHN, Prof. Chem., Wesleyan Univ., Middletown, Conn.
JONES, F., 16 Burling Slip, New York City.
JONES, JOSEPH, M. D., Prof. Chem., Univ. of Louisiana, New Orleans, La.

JONES, L. D., Marlboro, N. H.
JONES, RICHARD W., Prof. Chem., Univ. of Miss., Oxford, Miss.
JOY, Dr. C. A., Stockbridge, Mass.
JUDGE, J. F., M. D., N. W. corner Court & Cutter Sts., Cincinnati, O. Chem.
JULIEN, ALEXIS A., Sch. of Mines, Columbia Coll., New York City.
JUNGK, K., Chemist, Cincinnati, O.
KALBFLEISCH, ALBERT M., corner Fulton & Cliff Sts., New York City.
KALBFLEISCH, E. M., Care of J. L. Morgan & Co., 47 Fulton St., New York City.
KALBFLEISCH, FRANKLIN A., cor. Fulton & Cliff Sts., New York City.
KAMMERER, FRED, N. Y. City.
KASTENBINE, LOUIS, Prof. in Sch. of Pharmacy, Louisville, Ky.
KEDZIE, Dr. R. C., Lecturer on Chem., Olivet Coll., Olivet, Mich.
KEDZIE, W. K., Prof. Chem. and Physics, State Agric. Coll., Manhattan, Kans.
KEEP, Prof. JOSIAH, Cal. Acad. Sci., Alameda, Cal.
KENDRICK, Maj. H. L., Prof. Chem., U. S. M. A., West Point, N. Y.
KENT, Dr. J. EMERSON, Ph.D., 2100 Green St., Phila., Pa.
KERR, Prof. J. H., Colorado Springs, Colo. Chem.
KERR, W. C., State Geologist of N. C., Raleigh, N. C.
KERSTING, HERMANN, 324 Princeton St., E. Boston, Mass.
KERVEY, H. R., Ph.G., Box 190, West Chester, Pa. Chem.
KEYSER, P. D., 1630 Arch St., Phila., Pa.
KIMBALL, J. P., Ph.D., Century Club, 109 E. 15th St., New York City. Prof. of Geol., Lehigh Univ., Bethlehem, Pa.
KIMBERLEY, Prof. JOHN, Univ. of North Carolina, Chapel Hill, N. C.
KING, CHAS., 39 W. 14th St., New York City.
KLEINSCHMIDT, THEO., Care of Theo. Hall, 600 So. 2nd St., St. Louis, Mo.
KNEELAND, SAMUEL, Mass. Inst. Tech., Boston, Mass.
KNOWLTON, W. J., 168 Tremont St., Boston, Mass.
KNOX, S. B. P., A. M., M. D., Santa Barbara, Cal. Chem.
KOCH, CHAS., 502 Diamond St., Phila., Pa. Chem.
KONIG, G. A., Ph.D., Ass't Prof. Chem., Univ. of Pa., Phila., Pa.

KRACKOWITZER, 113 Water St., N. Y. City.
KUNG, GEO. F., 72 First St., Hoboken, N. J. Chem.
KUTTROFF, ADOLF, 98 Liberty St., N. Y. City.
LAND, WM. J., Box 305, Atlanta, Ga. Analyt. Chem.
LANGLEY, JOHN W., Prof. of Chem., Univ. of Mich., Ann Arbor, Mich.
LARKIN, E. H., (Larkin and Schaeffer), Anal. and Man. Chem., 209 Myrtle St., St. Louis, Mo.
LARNE, Dr. F. A. H., Quebec, Can,
LATTIMORE, S. A., Ph.D., Prof. Chem., Rochester, Univ., Rochester, N. Y.
LAUDY, L. H., Sch. of Mines, Columbia Coll., N. Y. City.
LAUGHLIN, W., Faraday Chem. Man'f'g Co., 402 Locust St., Phila., Pa.
LAWLER, C. J., cor. Bedford & Gates Ave., Brooklyn, N. Y.
LEA, Prof. A., Dartmouth Coll., Hanover, N. H.
LEA, M. CAREY, 1622 Locust St., Phila., Pa.
LEAVENS, H. W., E. M., Assayer Swansea Smelting Works, Denver, Colo.
LECONTE, JOHN, Univ. of Cal., Berkeley, Cal. Phys.
LEDOUX, ALBERT R., A. M., Ph.D., Chapel Hill, N. C. Chem.
LEE, RICHARD H., Lawrence Scientific School, Cambridge, Mass.
LEEDS, A. R., Prof. Chem., Stevens Inst. Tech., Hoboken, N. J.
LEES, WM. T., cor. Ave. A and 21st St., N. Y. City. Chem.
LEGRAND, FRANK E., 119 Benefit St., Providence, R. I.
LEMANS, W. C., M. A., Prof. Chem., Ohio Wesleyan Univ., Delaware, O.
LENNIG, CHAS., Phila., Pa.
LEONHARD, ARTHUR C., 1728 Washington Ave., St. Louis, Mo.
LEVISON, W. GOOLD, 314 Livingston St., Brooklyn, N. Y.
LEWIS, HENRY C., A. M., Germantown, Phila., Pa.
LIEBIG, G. A., Ph.D., Baltimore, Md.
LILLARD, B., Ph.D., Nashville, Tenn. Pharm.
LILLIE, SAMUEL M., 333 Pine St., Phila., Pa.
LINDSLEY, JOHN B., M. D., Nashville, Tenn.
LIPPS, JOHN S., 59 Christie St., M. Y. City.
LITTON, Prof. A., 2220 Eugenia St., St. Louis, Mo. Chem.
LOCHSCHMIDT, Prof. C., St. Vincent's Coll., Beatty, Pa.
LOCKE, C. A., Atlanta, Ga.
LOCKETT, S. H., Prof. Chem., Univ., Alexandria, La.
LOEW, Dr. OSCAR, Smithsonian Inst., Washington, D. C.

LOOMIS, ELIAS, LL.D., Prof. Nat. Philos., Yale Coll., New Haven, Conn.

LOOMIS, Prof. SILAS L., M. D., Washington, D. C. Chem., Physics.

LORD, N. W., E. M., Cincinnati, O.

LOUGHLIN, Dr. J. E., 632 Christian St., Phila., Pa.

LOUGHRIDGE, R. H., Ph.D., Box 404, Atlanta, Ga. Chem.

LOVE, EDWARD G., Ph.D., Columbia Coll., N. Y. City. Gas examiner to the city of New York.

LOVERING, JOSEPH, Prof. Physics, Harvard Univ., Cambridge, Mass.

LOWE, C. B., F., Care of M. A. Stovel, Augusta, Ga.

LOWE, FRANCIS A., Smithsonian Inst., Washington, D. C. Chem., Phys.

LUPTON, N. T., Prof. Chem., Vanderbilt Univ., Nashville, Tenn.

LYLE, DAVID A., Springfield, Mass.

LYMAN, C. S., Sheffield Scientific Sch., New Haven, Conn.

LYMAN, H. M., A. M., M. D., Prof. Chem. and Pharm., Rush Med. Coll., West Adams St., Chicago, Ill.

LYONS, Prof. A. B., M. D., 33 Lafayette Ave., Detroit, Mich. Chem.

MABERY, C. F., Ass't, Harv. Univ., Cambridge, Mass. Chem.

MACFARLANE, THOMAS, Actonvale, Quebec, Can. Chem., Phys.

MACKINTOSH, J. B., E. M., C. E., 55 Garden St., Hoboken, N. J.

MACY, ARTHUR, Ph.B., School of Mines, Columbia Coll., N. Y. City.

MAGHEE, J. H., C. E., Sch. of Mines, Columbia Coll., N. Y. City.

MAISCH, Prof. J. M., 145 No. 10th St., Phila., Pa. Chem.

MALLET, J. W., F. R. S., Prof. of Chem., University of Virginia, Albemarle Co., Va.

MALLETT, E. J., jr., Prof. Chem., Territorial School of Mines, Golden, Colo.

MALLINCKRODT, O., of Mallinckrodt & Co., St. Louis, Mo.

MANSFIELD, Prof. J. M., Mt. Pleasant, Iowa. Chem., Phys.

MAPES, CHAS. V., 158 Front St., New York City.

MARINER, G. A., 194 So. Water St., Chicago, Ill. Analyt. Chem.

MARKOE, GEO. F. H., Ph.G., Prof. of Chem., Mass. Coll. Pharm., 61 Warren St., Boston, Mass.

MARSH, E. J., Prof. Chem., Shurtleff Coll., Albion, Ill.
MARSHALL, J. P., Prof. Chem., Tufts Coll., Medford, Mass.
MARTIN, Rev. CARLISLE, P. B., Prof. Chem., State Agric. Coll., College Station, Texas.
MARTIN, Prof. D. S., 236 W. 4th St., New York City.
MARTIN, J. McC., Prof. Nat. Sci., Ohio Univ., Athens, O.
MARTIN, WM. J., Prof. Chem. and Nat. Hist., Davidson College, Mecklenberg Co., N. C.
MARVIN, J. B., 153 W. Chestnut St., Louisville, Ky.
MASON, DAVID, Sup't of the Magnetograph Observatory of the U. S. C. and Geodetic Surv., Madison, Wis. Phys.
MASON, WM. P., Troy, N. Y.
MATHEWS, FRANK, Farmington, Ill. Chem.
MATTHIESSEN, F. O., 106 Wall St., N. Y. City.
MAUPIN, S., University of Virginia, Va.
MAYER, ALFRED M., Prof. of Phys., Stevens Inst. Tech., Hoboken, N. J.
MAYNARD, G. W., 24 Cliff St., N. Y. City.
McCALLS, J. GALEN, Perry, Pa.
McCLINTOCK, FRANK, West Union, Fayette Co., Iowa. Phys.
McCLUNG, CALVIN M., Knoxville, Tenn.
McCONNELL, Prof. J. B., 157 Bleury St., Montreal, Can. Phys.
McCORKLE, J. A., Lecturer on Chem., Long Island Coll. Hospital, Brooklyn, N. Y.
McCREE, WILLIAM, Box 2183, Denver, Colo.
McCREATH, ANDREW S., Harrisburg, Pa.
McFADDEN, T., Prof. Nat. Sci., Otterbein Univ., Westerville, O.
McFARLAND, F., Prof. Chem. and Toxicol., Cumberland Univ., Lebanon, Tenn.
McINTIRE, CHARLES, Lafayette Coll., Easton, Pa.
McMURTRIE, W. C., E. M., Ph.D., Dep't Agric., Washington, D. C.
MEAD, M. L., Prof. Chem., Wooster Univ., Wooster, O.
MEANS, Rev. ALEXANDER, D.D., A.M., M. D., LL.D., Oxford, Ga. Chem.
MEARS, LEVERETT, Ph.D., Instructor in Chem., Amherst Coll., Amherst, Mass.
MEIER, ED. D., of Adolphus Meier & Co., Chemist, 26 No. Main St., Louis, Mo.
MELLISS, D. E., Ph.D., Care of Henry Clews & Co., 22 Wall St., N. Y. City.
MENDENHALL, Prof. T. C., Columbus, O.

MERRIAM, H. P., Prof. Org. Chem., Northwestern Univ., Evanston, Ill.
MERRICK, J. M., B.S., 59 Broad St., Boston, Mass.
MERRILL, N. F., Prof. Chem., Care of Boston Journ. of Chem., Boston, Mass.
MERRILL, RUFUS, Care Downer Kerosene Oil Works, Boston, Mass.
MERRIMAN, G. B., Prof. Nat. Philos., Rutger's Coll., New Brunswick, N. J.
MERTZ, H. N., Steubenville, O.
MERZ, HENRY, 55 Maiden Lane, New York City.
METTAUER, HENRY A., M. D., Macon, Ga. Chem.
METTENHEIMER, Dr., Third Ave., between 48th & 49th Sts., New York City.
MEW, WILLIAM M., Washington, D. C.
MEYERS, JOHN C., Irvington, Ind.
MICHELSON, A. A., Instructor in Phys. and Chem., U. S. Naval Acad., Annapolis, Md.
MILES, WM. A., 55 Christie St., N. Y. City.
MILKMAN, MOSES, 306 Main St., Worcester, Mass.
MILLER, A. W., M. D., 860 No. 5th St., Phila., Pa. Chem.
MILLER, GEO. M., 20 Broad St., New York City.
MITCHELL, HOWARD W., Denver, Colo.
MIXTER, WM. G., Prof. Chem., Sheffield Lab., New Haven, Conn.
MONROE, HENRY S., E.M., Prof. Min. and Met., 195 Harrison St., Brooklyn, N. Y.
MONTGOMERY, HENRY, A. M., Toronto Collegiate Inst., Toronto, Can. Inorg. Chem.
MOORE, G. E., Ph.D., Passaic Zinc Works, Jersey City, N. J.
MOORE, JAMES W., M.D., Prof. Phys., Lafayette Coll., Easton, Pa.
MORGAN, JAMES L., jr., 47 Fulton St., New York City.
MORGAN, THOMAS, Care of Henry Morgan & Co., Montreal, Can.
MORLEY, EDW. W., M. D., Ph.D., Prof. of Chem., W. R. Coll., Hudson, O.
MORRELL, THOMAS T., Chemist, Cambria Iron Co., Johnstown, Cambria Co., Pa.
MORRIS, J. CHESTON, M. D., 1514 Spruce St., Phila. Pa. Chem.
MORRISON, CAPT. J. A., Ass't Prof. Chem., Virginia Military Inst., Lexington, Va.

MORSE, FRANK B., B. S., 14 Worcester Square, Boston, Mass. Chem., Phys.
MORSE, H. N., Ph.D., Ass't Prof. Chem., Johns Hopkins Univ., Baltimore, Md.
MORTON, DR. DOUGLAS, Louisville, Ky.
MOSES, A. O., Charleston, S. C.
MOSES, T. F., Prof. Nat. Sci., Urbana Univ., Urbana, O.
MOSS, J. CLARK, Robinjs Nest, P. O., Peoria Co., Ill. Pharmacentical Chemist.
MOTT, HENRY A., jr., Ph.D., E. M., Box 2036, New York City, Analyt. Chem.
MOTT, NALENTINE, 62 Madison Ave., New York City.
MOULTON, M. H., 31 High St., Portland Me.
MUNROE, C. E., Prof. of Chem., U. S. N. Acad., Annapolis, Md.
MUNROE, H. S., New York City.
MUNROE, W. C., M. D., Penn Yan, N. Y., Chem., Phys.
MUNSEN, W. H., 18 Sight St., Bath, Pa.
MUNSON, T. VOLNEY, Adj. Prof. Chem., Kentucky Univ., Lexington, Ky.
MUZARD, Prof. La Bestre Glass Works, So. Brooklyn, N. Y.
MYERS, JOHN A., Prof. Chem., Bethany, W. Va.
NASON, Rev. ELIAS, North Billerica, Mass. Acoustics.
NASON, HENRY B., Prof. of Chem., Renssalaer Polytechnic Inst., Troy, N. Y.
NEALE, ARTHUR T., Middletown, Conn.
NEGUS, T. S. & J. D., (Chronometer Makers,) 172 Water St., N. Y. City.
NEWTON, Prof. H. A., Yale Coll., New Haven, Conn.
NEWTON, ISAAC, 49 Wall St., N. Y. City.
NEWTON, JOHN, 33 W. Houston St., N. Y. City.
NEWTON, JOHN, Mary Esther, Santa Rosa Co., Fla.
NICHOLS, C. L., Prof. Analyt. Chem., Brown Univ., Providence, R. I.
NICHOLS, EDW. L., Ph.D., (Gött.), Fellow Johns Hopkins Univ., Baltimore, Md. Phys.
NICHOLS, E., Ass't in Analyt Chem., Rensselaer Polytechnic Inst., Troy, N. Y.
NICHOLS, JAMES R., Haverhill, Mass.
NICHOLS, W. H., New York City.
NICHOLS, WM. RIPLEY, Prof. Chem., Mass. Inst. Technol., Boston, Mass.
NIESE, H. E., Jersey City, N. J.

NIPHER, FRANCIS E., Prof. of Physics, Washington Univ., St. Louis, Mo.
NORRIS, ISAAC, M. D., 1424 Walnut St., Phila., Pa. Chem., Phys.
NORTON, Prof. L. A., Ohio Agric. and Mech. Coll., Columbus, O.
NORWOOD, CHAS. J., Bethel Coll., Russellville, Ky. Phys.
NORWOOD, Prof. J. G., Columbia, Mo.
O'CONNER, J. T., 62 W. 17th St., N. Y. City.
OLESON, O. M., Ph.G., Fort Dodge, Iowa. Chem.
ORDWAY, J. M., Prof. Chem., Mass. Inst. Tech., Boston, Mass.
ORNE, JOHN, jr., Cambridge, Mass. Phys.
ORTON, E., Ohio Agric. and Mech. Coll., Columbus, O.
OSBORN, H. S., LL.D., State Univ., Oxford, O. Analyt. Chem.
ORTH, A., Care of F. Bredt & Co., N. Y. City.
OSBORN, L. M., LL.D., Prof. Nat. Sci., Miamia Univ., Oxford, O.
OSBORNE, J. W., Washington, D. C.
OSBUN, I. J., A. M., State Normal School, Salem, Mass. Chem., Phys.
OTIS, GEO. ALEXANDER, Washington, D. C.
OWEN, RICHARD, New Harmony, Ind.
PACKARD, R. L., Ass't Prof. Chem., Bowdoin Coll., Brunswick, Me.
PAGE, GEORGE SHEPARD, 10 Warren St., N. Y. City.
PARKER, H. W., Prof. Chem., Iowa Coll., Grinnell, Iowa.
PARKER, T. J., Cooper Union, N. Y. City.
PARKINSON, D. B., Prof. Chem. and Phys., Carbondale, Ill.
PARSONS, C. C., 542 E. 20th St., N. Y. City.
PARSONS, W. J., 34 Pine St., N. Y. City.
PATCH, MAURICE B., Houghton, Mich.
PATRICK, GEORGE E., State Univ., Lawrence, Kans. Chem.
PAYNE, WILLIAM M., South Division High School, Chicago, Ill.
PEABODY, SELIM H., Ph.D., Prof. Mech. Eng. and Physics, Illinois Univ. Champaign, Ill.
PEALE, ALBERT C., Washington, D. C.
PEARCE, RICHARD, Black Hawk, Colo.
PECKHAM, S. F., Prof. Chem., Univ. of Minnesota, Minneapolis, Minn.
PEIRCE, JOHN, Providence, R. I.
PEIRCE, WM. C., S.T.D., Prof. Chem. and Nat. Hist., Baldwin Univ., Berea, O.

PENFIELD, SAM'L L., Ass't in Analyt. Chem., Sheffield Lab., New Haven, Conn.
PENHOEL, M. DE, M. D., Willetts Point, N. Y.
PERCY, C. B., Ass't Prof. Civil Eng., Washington & Lee Univ., Lexington, Va.
PERKINS, M., Prof. Chem., Union Coll. Schenectady, N. Y.
PEROT, CHAS. P., 142 No. 18th St., Phila., Pa. Metaphysics.
PERRIN, F. D., M. D., Boston, Mass. Chem.
PERRY, M. D., Hudson, Mass.
PETER, ALFRED M., Lexington, Ky. Inorg. Chem.
PETER, ROBERT, Prof. of Chem. and Physics, Kentucky Univ., Lexington, Ky.
PHELPS, ELIZA B., M. D., Woman's Medical Coll., N. Y. Infirmary, New York City.
PHELPS, GEO. N., 127 First Place, Brooklyn, N. Y.
PHELPS, WM. B., Chapel Hill, N. C.
PHILIPS, Prof. G. MORRIS, A.M., West Chester, Pa. Phys.
PHINNEY, A. H., Ph.D., Instructor in Chem., Cornell Univ. Ithaca, N. Y.
PICKERING, EDW. C., Harvard Coll. Observ., Cambridge, Mass. Phys.
PICKERING, W. H., 84 Mt. Vermon St., Boston, Mass. Phys.
PICKHARDT, CARL, 98 Liberty St., N. Y. City.
PICKHARDT, WM., 98 Liberty St., N. Y. City.
PIPER, R. U., M. D., Chicago, Ill. Chem.
PRIZ, ANTHONY, Long Island City, L. I., N. Y.
PITKIN, CHAS. A., Box 282, Newport, R. I.
PITMAN, Prof. STEPHEN, M., A. M. B., Tufts. Coll., College Hill, Mass. Chem.
PLUMMER, SARA A., Santa Barbara, Cal. Chem.
PLUMPTON, G. W., 245 Broadway, N. Y. City.
POE, ORLANDO M., Washington, D. C.
POHLE, Dr. J., Prof. Metall., Terr. School of Mines, Golden, Colo.
POOLE, HERMAN, Buffalo, N. Y. Chem. Phys.
PORTER, CHAS. H., Newfall, Albany, N. Y.
POTTER, Prof. B. S., No. Missouri State Normal School, Kirksville, Mo. Phys.
POTTER, W. B., E. M., Prof. Min. and Met., Washington Univ., St. Louis, Mo.
POWHATAN, A. C., Baltimore, Md.
PRACHAZKA, GEO. A., 162 Second Ave., N. Y. City.
PRATT, Prof. N. A., M. D., 104 Chestnut St., Phila., Pa.
PRATT, W. H., Davenport, Iowa.

PRESCOTT, A. B., M. D., Prof. Chem., Univ. of Michigan, Ann Arbor, Mich.

PRESCOTT, Prof. RICHARD, Albany, N. Y. Spectroscopy, Phys.

PRESTON, W. C., Ph.B., Ass't Chem., Med. Dep't Iowa State Univ., Iowa City, Iowa.

PRICE, T., San Francisco Assaying and Refining Co., Montgomery St., San Francisco, Cal.

PRIME, Prof. FREDERICK, jr., Phila., Pa.

PRUDDEN, T. M., M. D., Instructor in Chem., Yale Coll., New Haven, Conn.

PYNCHON, THOMAS R., D. D., LL.D., Hartford, Conn. Chem., Phys.

RAFTER, GEO. W., C. E., Rochester, N. Y. Chem., Phys.

RALPHY, A. J., Nashville, Brown Co., Ind. Chem.

RAND, B. H., Prof. Chem., Jefferson Med. Coll., Phila., Pa.

RANDOLPH, JOHN C., A. M., E. M., 35 Broadway, N. Y. City. Chem.

RAINS, G. W., Prof. Med. Chem. and Pharm., Med. Coll. of Georgia, Augusta, Ga.

RAVENEL, Dr. St. J., Charleston, S. C.

RAYMOND, R. W., Ph.D., Brooklyn, N. Y.

REDD, Rev. A. F., Prof. Phys. and Chem., Univ. of N. C., Chapel Hill, N. C.

REDDING, THOS. B., A. M., New Castle, Ind. Chem.

REMSEN, IRA, M. D., Ph.D., Prof. Chem., Johns Hopkins Univ., Baltimore, Md.

RENWICK, E. S., 16 Murray St., N. Y. City.

RICE, JOHN MINOT, Prof. Math., U. S. N., Head of Dep't Mech., U. S. N. Acad., Annapolis, Md.

RICHARDS, R. H., Mass. Inst. Technol., Boston, Mass.

RICHARDS, Mrs. R. H., Mass. Inst. Technol., Boston, Mass. Analyt. Chem.

RICHARDSON, E. G., 92 Tremont St., Bath, Pa.

RICKARD, W. S. (F. C. S., London, Eng.), Tucson, Arizona Terr. Technical Chem.

RICKETTS, P. DE P., E. M., Ph.D., Columbia Coll., N. Y. City. Chem.

RIGGS, GEO. W., jr., Ph.B., Chemist, Care of Potter & Riggs, Washington Univ., St. Louis, Mo.

RILEY, CHAS. V., Washington, D. C.

RINCK, HOWARD, Easton, Pa.

RISING, B. W., Ph.D., Prof. Chem. and Metall., Univ. of Cal., Oakland, Cal.

ROBBINS, CHAS. A., 91 Fulton St., N. Y. City.
ROBERTS, C. H., Sup't City Schools, Rochester, Minn.
ROBERTS, Prof. G. S., E. M., C. E., 88 Union Ave., Brooklyn E. D., N. Y. Chem.
ROBERTS, J. F., M. E., 426 Walnut St., Phila., Pa.
ROBERTS, W. CHANDLER, N. Y. City.
ROBERTSON, R. S., Fort Wayne, Ind.
ROBEY, WM., Rochester, N. Y.
ROBINSON, F. C., Bowdoin Coll., Brunswick, Me. Chem.
ROCKWELL, Prof. G. J., 20 E. 42nd St., N. Y. City.
ROCKWOOD, CHAS. G., jr., Ph.D., Prof. Mathematics, Coll. of N. J., Princeton, N. J.
ROEDER, F., Chemist, Cincinnati, O.
ROEPPER, C. W., Bethlehem, Pa.
ROGERS, F. M., N. Y. City.
ROGERS, Rev. J. L., Prof. Nat. Sci., Willamette Univ., Salem, Oregon.
ROGERS, R. E., 1004 Walnut St., Phila., Pa. Chem.
ROGERS, W. B., LL.D., Pres. Inst. Technol., Boston, Mass.
ROLFE, W. J., A. M., Cambridgeport, Mass.
ROLKER, C. M., E. M., 5 E. 31st St., N. Y. City.
ROOD, O. N., Prof. Physics, Columbia Coll., N. Y. City.
ROOT, ELIHU, Ph.D., Prof. Math. and Nat. Philos., Amherst Coll., Amherst, Mass.
ROOT, ELISHA W., 43 Pine St., N. Y. City.
ROSE, Dr. P. B., Ann Arbor, Mich.
ROSENGARTEN, J. S., Phila., Pa.
ROSSI, AUGUST J., 22 W. 11th St., N. Y. City.
ROWE, W. H., Portland Med. School, Portland, Me.
ROWLAND, HENRY A., Prof. Physics, Johns Hopkins Univ., Baltimore, Md.
RUIZ, JOAN DONDE, 4*a* calle de los Rosados No. 48, Merida, Yucatan, Mexico. Professor of Pharm., Chem. and Nat. Hist.
RUPP, WILLIAM, Chemist, 233 E. 55th St., N. Y. City.
SABIN, A. H., Prof. of Chem., Ripon Coll., Ripon, Wis.
SADTLER, SAMUEL P., Ph.D., Prof. of Chem., Univ. of Pa., Phila., Pa.
SAFFORD, Prof. JAMES M., Vanderbilt Univ., Nashville, Tenn. Chem.
SAFFORD, TRUMAN H., Prof. Physics, Williams Coll., Williamstown, Mass.
SAMPSON, W. T., Com. U. S. N. Acad., Annapolis, Md. Chem., Phys.

SAUNDERS, ERNEST C., Analyt. Chemist to Montreal Coll. of Pharm., 11 Baile St., Montreal, Can.
SAVILLE, JAS. HAMILTON, Washington, D. C.
SAWYER, GEO. F., Belleville, Jefferson Co., N. Y. Chem., Phys.
SCHAEFFER, C. A., Ph.D., Prof. Analyt. Chem., Cornell Univ., Ithaca, N. Y.
SCHANCK, J. S., LL.D., Prof. Chem., Coll. of N. J., Princeton, N. J.
SCHICKEL, EDWARD B., 119 Broadway, cor. Elm St., Buffalo, N. Y. Chem.
SCHIEL, Dr. J., St. Louis, Mo.
SCHLEY, WM. S., Atlanta, Ga. Chem.
SCHMETZ, H. J., Leroy, N. Y.
SCHMIDT, A., St. Louis, Mo.
SCHRADER, E. R., Prof. Chem. and Phys., Johnson Coll., Quincy, Ill.
SCHRAGE, WM., Sheboygan, Wis.
SCHRENK, JOSEPH, College Point, Queens Co., N. Y. Chem.
SCHROEDER, E., Jersey City, N. J.
SCHULTZ, CHAS. H., cor. 17th St. & Broadway, N. Y. City.
SCHUSSLER, Dr., Newark, N. J.
SCHWEITZER, P., Prof. of Chem., State Univ., Columbia, Mo.
SCHWENSEN, F. M. L., Housatonic, Mass. Chem.
SCOTT, J. G., Westfield, Mass. Chem., Phys.
SCOVELL, Prof. J. T., Terre Haute, Ind.
SEAGRAVE, FRANK E., L. B. 189, Providence, R. I. Mathematics.
SEAMAN, WM. H., Washington, D. C.
SEARLE, HENRY R., Washington, D. C.
SECOUR, E. H., 545 W. 18th St., N. Y. City.
SEELEY, CHAS. A., 125 E. 40th St., N. Y. City. Chem.
SEELY, Prof. HENRY M., Middlebury, Vt. Chem.
SEIGHOERTNER, A. L., foot of So. 9th St., N. Y. City.
SEMANS, W. O. Prof. Chem. and Phys., Wesleyan Univ., Delaware, O.
SENEFF, FRED W., 217 E. 21st St., N. Y. City.
SHAPLEIGH, W., F. C. S., 1 Wall St., N. Y. City.
SHARPLES, S. P., A. B., Prof. of Chem., Boston Dental Coll., 114 State St., Boston, Mass. Chem., Phys.
SHATTUCK, Miss LYDIA, Mt. Holyoke Sem., South Hadley, Mass.
SHEFFER, H. W., Analyt. Chem., 209 Myrtle St., St. Louis, Mo.

SHELDON, D. S., A. M., LL.D., Griswold Coll., Davenport, Iowa. Chem.
SHEPARD, Dr. C. U., Prof. Nat. Hist., Amherst Coll., Amherst, Mass.
SHEPARD, Dr. C. U., jr., Charleston, S. C.
SHERER, E., 122 Front St., N. Y. City.
SHERMAN, J. E., Newburyport, Mass.
SHERMAN, JOHN, Washington, D. C.
SHERMAN, N. B., New Bedford, Mass.
SHERMAN, O. T., Newburgh, N. Y. Math.
SHERMAN, WM. TECUMSEH, Washington, D. C.
SHROCK, FRANK H., So. Pueblo, Colo.
SIGSBEE, CHARLES DWIGHT, Washington, D. C.
SILLIMAN, Prof. B., Yale Coll., New Haven, Conn. Chem., Phys.
SILLIMAN, C. H., Prof. Nat. Sci., Adrian, Mich.
SIMON, W., Ph.D., Prof. Chem., Md. Coll. Pharm., Baltimore, Md.
SINGLETON, M. T., Atlanta, Ga. Phys.
SKIDMORE, S. T., A. M., Prof. of Physics, Girls' Normal School, cor. 17th & Spring Garden Sts., Phila., Pa. Molecular Forces.
SKINNER, AARON NICHOLS, Washington, D. C.
SLOANE, T. O'CONOR, E. M., A. M., Ph.D., Brooklyn, N. Y.
SMITH, DAVID, Washington, D. C.
SMITH, EDGAR F., Ph.D., Univ. of Pa., West Phila., Pa.
SMITH, EUGENE A., Ph.D., Prof. of Chem., Univ. of Ala., Tuscaloosa, Ala.
SMITH, G. H., M. D., Rochester, N. Y.
SMITH, GEO. L., State Normal School, Baltimore, Md. Chem., Phys.
SMITH, H., Union Square, N. Y.
SMITH, H. L., Hobart Coll., Gambier, O.
SMITH, HERBERT W., Box 2621, St. Paul, Minn. Chem.
SMITH, J. F., Lynn, Mass.
SMITH, Dr. J. LAWRENCE, Louisville, Ky.
SMITH, T. BERRY, Prof. of Chem. and Phys., Pritchett School Inst., Glasgow, Mo.
SMOCK, J. C., Prof. Metall., Rutger's Sci. School, New Brunswick, N. J.
SMYTH, GEO. A., Burlington, Vt. Chem.
SNIVELY, JOHN H., Prof. Analyt. Chem., Tennessee Coll. Pharm., Nashville, Tenn.
SNOW, J. A., Lynn, Mass.

SOUTHWORTH, M. S., Ph.D., Prof. Chem., Williams Coll., Williamstown, Mass.
SPANG, NORMAN, Etna, Pa.
SPANGENBERG, F., 1165 Broadway, N. Y. City.
SPERRY, L. B., M. D., Prof. Chem., Ripon Coll., Ripon, Wis.
SPENCER, JOSEPH WM., A. B., Ph.D., F. G. S., Hamilton, Ontario, Can. Chem., Phys.
SPOFFORD, AINSWORTH R., Washington, D. C.
SPRINGER, ALFRED, Ph.D., Cincinnati, O.
SQUIBB, E. R., M. D., Brooklyn E. D., N. Y.
SQUIRE, STEWART C., Rahway, Union Co., N. J.
STADTMULLER, L., New Haven, Conn.
STAHR, Rev. J. S , Prof. Chem., Franklin & Marshall Coll., Lancaster, Pa.
STALLO, J. B., Mathematical Physics, Cincinnati, O.
STALNAKER, J. W., M. D., Austin, Tex. Chem.
STANLEY, Prof. RICHARD C., Bates Coll., Lewiston, Me. Chem.
STANTON, W. S., Beverly, Mass.
STEARNS, F., Manufacturing Pharmacist, Detroit, Mich.
STEARNS, I. A., M. E., Wilkesbarre, Pa.
STEINER, L. H., M. D., Frederick City, Md. Chem.
STEITZ, A., 203 Pine St., St. Louis, Mo.
STERLING, THEO., Prof. Chem., Kenyon Coll., Gambier, O.
STEVENS, T. M., M. D., Prof. Analyt. Chem., Coll. Phys. and Surgeons, Indianapolis, Ind.
STICHT, JOHN C., 18 Maiden Lane, N. Y. City.
STILLMAN, H. B., Stevens Inst. Tech., Hoboken, N. J.
STILLMAN, JOHN M., Ph.B., Univ. of Cal., Berkeley, Cal. Chem.
STILLMAN, O. B., Standard Sugar Refinery, Boston, Mass.
STILLWELL, C. M., 18 Exchange Place, New York City.
ST. JOHN, JOSEPH S., State Normal School, Albany, N. Y.
STODDARD, J. T., Ph.D., Northampton, Mass. Chem., Phys.
STONE, C. F., Instructor in Chem., Mass. Inst. Tech., Hoboken, N. J.
STORER, F. H., Prof. Chem., Bussey Inst. of Harvard Univ., Jamaica Plain, Mass.
STORRS, HENRY E., Jacksonville, Ill.
STORY, Prof. WM. E., Johns Hopkins Univ., Baltimore, Md. Math.
STRATFORD, Dr. W., Adj. Prof. Chem., Med. Dep't Univ. of N. Y., New York City.

STRIEDENGER, J. H., 33 W. Houston St., N. Y. City.
STRONG, Rev. G. J., Prof. Nat. Philos. and Chem., College of the Holy Cross, Worcester, Mass.
STRUTHERS, R. H., Fort Atkinson, Wis. Phys.
STUART, A. P. S., A. M., Prof. Chem., Lincoln, Neb.
STUART, E. B., 125 22nd St., Chicago, Ill.
STUNTZ, C. R., M. D., Prof. Chem., Terrace Park, Hamilton Co., O.
SUMMERS, Prof. T. O., jr., M. D., Nashville, Tenn.
SWALLOW, Prof. GEORGE C., Columbia, Mo.
SWALLOW, Miss E. H., Mass. Inst. Tech., Boston, Mass.
SWEENY, WM. S., Easton, Pa.
SWEET, E. T., Silverton, Colo. Chem.
TAYLOR, Dr. A. F., Andover, Mass.
TAYLOR, Prof. A. R., Lincoln, Ill.
TAYLOR, E. R., Chemist, Cleveland, O.
TAYLOR, W. H., Prof. Chem., Med. Coll. of Virginia, Richmond, Va.
TERNE, BRUNO, Chicago, Ill.
TERRY, GEORGE E., Waterbury, Conn.
TERRY, Prof. N. M., Ph.D., U. S. N. Acad., Annapolis, Md. Phys.
THOMAS, F. S., F. M. M. S., Hanson, Mass.
THOMPSON, A. H., Washington, D. C.
THOMPSON, C. O., Prof. Chem., Worcester Inst. Worcester, Mass.
THOMSON, E., Phila., Pa.
THURSTON, Prof. R. H., Stevens Inst. Technol., Hoboken, N. J.
TIFFANY, ASA S., Davenport, Iowa. Chem.
TILDEN, W. C., Erie R. R. Offices, N. Y. City.
TINGLEY, Prof. JEREMIAH, Allegheny Coll., Meadville, Pa., Phys.
TONER, J. M., Washington, D. C.
TOWLER, Dr. J., Prof. Syracuse Univ., Syracuse, N. Y.
TREADWELL, G. A., L. B. 1404, San Francisco, Cal.
TRIMBLE, HENRY, Univ. of Pa, Phila., Pa.
TROUVELOT, GEO. H. E., Chemist, 99 Garden St., Cambridge, Mass.
TROWBRIDGE, JOHN, Ass't Prof. Physics, Harvard Univ., Cambridge, Mass.
TROWBRIDGE, W. P., Prof. Mech. Physics, Yale Coll., New Haven, Conn.
TUCKER, J. H., Ph.B., 46 George St., Baltimore, Md.

TUCKER, Prof. W. G., M. D., Albany, N. Y.
TUTTLE, A. H., Prof. Physics, Columbus, O.
TUTTLE, Prof. D. K., Fulton St., near Fayette, Baltimore, Md.
TWINING, A. C., 137 Elm St., New Haven, Conn.
TWINING, E. H., Prof. Chem., Univ. of Minnesota, St. Anthony, Minn.
TWINING, W. J., Washington, D. C.
TYSON, S. T., Yale Coll., New Haven, Conn.
UPTON, JACOB K., Washington, D. C.
VAN BRUNT, C., Poughkeepsie, N. Y. Phys.
VAN DER WEYDE, P. H., M. D., 236 Duffield St., Brooklyn, N. Y.
VAN DYCK, Prof. F. C., Rutger's Coll., Hoboken, N. J.
VAN SLYKE, C. B., 1050 Main St., Dubuque, Iowa. Chem., Phys.
VAN WINKLE, A. S., Trenton, Ill. Chem.
VASEY, GEORGE, Washington, D. C.
VOSE, GEO. B., So. Weymouth, Mass. Phys.
WADSWORTH, M. E., Harvard Univ., Cambridge, Mass.
WAIT, CHAS. E., Missouri School of Mines, Rolla, Mo.
WALKER, JOSEPH B., Louisville, Ky. Chem.
WALLACE, S., 113 Walnut St., Phila., Pa.
WALLACE, WM. O., Ansonia, Conn.
WALLER, ELWYN, Ph.D., School of Mines, Columbia Coll., N. Y. City. Chem.
WALLINEKRODT, O., St. Louis, Mo.
WALLING, HENRY F, Boston, Mass. Phys.
WALZ, Dr. J., 18 Exchange Place, N. Y. City.
WARD, H. D. A., Prof. Chem., Chicago Med. Coll., Chicago, Ill.
WARD, LESTER F., Washington, D. C.
WARDER, Prof. ROBERT B., Univ. Cincinnati, North Bend, Hamilton Co., O. Org. Chem.
WARE, C. E., Boston, Mass.
WARNECKE, GEO., Hartford, Conn. Analyt. Chem.
WARREN, C. M., Brookline, Mass.
WASHBURN, R. R., M. D., Waldron, Ind. Phys.
WAYNE, Prof. E. S., M. D., Cincinnati, O. Chem.
WEAD, CHAS. K., Prof. Physics, Univ. of Mich., Ann Arbor, Mich.
WEBER, H. A., Prof. Chem., Illinois Indust. Univ., Champaign, Ill.
WEBSTER, Prof. NATHAN B., Norfolk, Va. Chem., Phys.

WEIGHTMAN & POWERS, Manuf. Chemists, S. W. cor. 9th & Parish Sts., Phila., Pa.
WEITBRECHT, GEO., St. Paul, Minn.
WELLING, JAMES C., Washington, D. C.
WELLS, JAS. S. C., Ph.D., Hackensack, N. J. Chem.
WELTY, H. G., Supt. of Schools, Marion, O. Chem. Anal.
WENDT, C. J., 760 Flushing Ave., Brooklyn, N. Y.
WENZELL, WM. T., San Francisco, Cal.
WETMORE, E. A., E. M., Marquette, Mich.
WHARTON, J., Box 2786, Phila., Pa.
WHEATLEY, C. M., Phœnixville, Pa.
WHEATLEY, WM., 423 Broadway, N. Y. City.
WHEELER, C. GILBERT, Prof. Chem., Univ. of Chicago, Chicago, Ill. Ex. rare chemicals.
WHEELER, GEO. M., Washington, D. C.
WHITE, CHAS. A., Washington, D. C.
WHITE, Prof. H. E., Athens, Ga.
WHITE, Dr. J. C., 10 Park Square, Boston, Mass. Org. Chem.
WHITE, S., Newbury, Vt.
WHITING, Miss, Prof. of Physics, Wellesley Coll., Wellesley, Mass.
WHITMORE, D., Lynn, Mass.
WHITNEY, Prof. J. D., Cambridge, Mass. Phys.
WILBER, G. M., 140 W. 20th St., N. Y. City. Chem.
WILDBERGER, Maj. R. H., Prof. Nat. Sci., Military Inst., Farmdale, Ky. Chem.
WILEY, Dr. H. W., Prof. Chem., Indiana Med. Coll., Lafayette, Ind.
WILKINSON, A. W., Coll. of the City of New York, N. Y.
WILLETT, Prof. J. E., Mercer Univ., Macon, Ga. Chem., Phys.
WILLIAMS, C. P., Ph.D., Prof. Chem., Columbia, Mo.
WILLIAMS, F. H., E. M., Wyandotte, Mich.
WILLIAMS, J. T., 43 W. 38th St., N. Y. City.
WILLSON, R. W., Instructor in Phys., Harvard Univ., Cambridge, Mass.
WILSON, JAMES O., Washington, D. C.
WINANS, H. N., 133 Lexington Ave., N. Y. City.
WING, C. H., Prof. Org. Chem., Cornell Univ., Ithaca, N. Y.
WINSLOW, J. E., Virgil, Cortland Co., N. Y. Chem.
WISE, R. A., Prof. Chem., William & Mary Coll., Williamsburg, Va.
WITTHAUS, Dr. R. A., jr., Univ. of New York, N. Y. City.

WOLFE, Dr. T. R., Prof. Chem., Delaware Coll., Newark, Del.
WOOD, Prof. EDWARD S., M. D., Ass't Prof. Chem., Harvard Univ., Cambridge, Mass.
WOODWARD, R. W., New Haven, Conn.
WORMLEY, Dr. T. G. Prof. Chem., Med. Dep't Univ. of Pa., Phila., Pa.
WORTH, Dr. O., Analyt. Chem., Pittsburg, Pa.
WORTHEN, Rev. H. W., Chelsea, Vt.
WRIGHT, ARTHUR W., Ph.D., Prof. Molecular Physics and Chem., Yale Coll., New Haven, Conn.
WRIGHT, B. F., St. Paul, Minn.
WRIGHT, J. W., Terre Haute, Ind.
WURTZ, H., 12 Hudson Terrace, Hoboken, N. J.
WYLIE, Prof. T. A., Bloomington, Ind. Phys.
WYNKOOP, Prof. G. H., M. D., Woman's Medical Coll., 128 Second Ave., N. Y. City.
YARROW, HENRY C., Washington, D. C.
YEAGER, Dr. T. P., Prof. Chem. Mühlenberg Coll., Allentown, Pa.
YEATMAN, J. W., Prof. Chem. and Physics, Univ. of Nashville, Nashville, Tenn.
YOUMANS, W. I., Care D. Appleton & Co., N. Y. City.
YOUNG, Dr. C. A., Coll. of N. J., Princeton, N. J.
ZUMBROCK, ANTON, Washington, D. C.

ASTRONOMERS.

ABBE, Prof. CLEVELAND, Army Signal Office, Washington, D. C.
ABERT, S. T., C. E., U. S. A. Engineer Bureau, Washington, D. C.
ABBOTT, Prof. T. C., Agricultural Coll., Lansing, Mich.
ACKERILL, D., Belleville, Ontario, Can.
ALEXANDER, Prof. STEPHEN, Princeton, N. J.
ANDREWS, Prof. J. W., Cornell Univ., Ithaca, N. Y.
ANDREWS, KITTIE GALLUP, Vineland, N. J.
ANDREWS, L., Southington, Conn.
ATKINS, F. K., Northfield, Rice Co., Mo.
ATWOOD, Gen. BENJAMIN, Paymaster General U. S. A., Washington, D. C.
AUSTEN, E. P., Harvard Coll. Observ., Cambridge, Mass.
BAILEY, Prof., Lincoln, Neb.
BAKER, MARCUS, A.M., U. S. Coast Survey, Washington, D. C.
BARDWELL, Prof. F. W., Lawrence, Kans.
BARKER, Prof. GEO. F., Univ. of Pa., Phila., Pa.
BARKER, NOAH, Exeter Mills, Me.
BARNARD, Dr. F. A. P., Columbia Coll., N. Y. City.
BARNARD, Gen. J. J., Army Engineer Bureau, Washington, D. C.
BARNES, Surg. Gen., JAS. K., Washington, D. C.
BARTLETT, ARTHUR K., Battle Creek, Mich.
BARTLETT, Prof. W. H. C., Mutual Life Ins. Co., N. Y. City.
BERGLAND, Lieut. ERIC, U. S. Engineer Bureau, Washington, D. C.
BESSELS, Dr. EMIL, Smithsonian Institution, Washington, D. C.
BIKLE, Prof. P. M., Gettysburg, Pa.
BIRNIE, Lieut. ROGERS, U. S. Army, Washington, D. C.
BLASIUS, WM., 1814 Vineyard St., Phila, Pa.
BLEASDELL, Rev. WM., A. M., D. C. L., Trenton, Ontario, Can.
BLODGETT, Hon. LORIN, Phila., Pa.
BOERNER, CHAS. G., Vevay, Ind.

Boss, Lewis, Dudley Observatory, Albany, N. Y.
Bowler, E. S., 97 Ohio St., Bangor, Me.
Brace, DeWitt B., Lockport, N. Y.
Brewer, Prof. W. H., Yale Coll., New Haven, Conn.
Brown, Lieut.Com. A. D., U. S. N., U. S. Naval Acad., Annapolis, Md.
Buff & Berger (Astronomical Instrument Makers), Boston, Mass.
Burnham, S. W., 52 Vincennes Ave., Chicago, Ill.
Burr, Fearing, Hingham Centre, Mass.
Bushee, Prof. James, Worcester, Mass.
Campbell, Jacob, 150 & 156 Columbia St., Brooklyn, N. Y.
Carpenter, Wm. B., Lansing, Kans.
Chandler, S. C., jr., 1308 Washington St., Boston, Mass.
Chapman, John, Care L. M. Rutherford, 172 2nd Ave., N. Y. City.
Chase, Prof. P. E., 904 Clinton St., Phila., Pa.
Christian, John B., Mount Carroll, Ill.
Clark, Alvan, Cambridgeport, Mass.
Clark, George, Cambridgeport, Mass.
Clark, Henry, Cambridgeport, Mass.
Clarke, Prof. J. E., Yale Coll., New Haven, Conn.
Coffin, Prof. J. H. C., Washington, D. C.
Collins, J. J., N. Y. Herald Office, N. Y. City.
Compton, Prof. Wm., N. Y. City Free College.
Cook, Prof. W. J., Morris, Ill.
Crady, Prof. J. M., Charleston, S. C.
Cruise, E. P., N. Y. City.
Curley, Prof. James, Observatory, Georgetown, D. C.
Cutts, Col. R. C., U. S. Coast Survey, Washington, D. C.
Dall, W. H., Smithsonian Inst., Washington, D. C.
Daniells, Prof. W. W., Madison, Wis.
Davidson, Prof. George, San Francisco, Cal.
Davies, John E., A. M., M. D., Box 1106, Madison, Wis.
Davis, Lieut. Com. C. H., U. S. N., Washington, D. C.
Davis, John, Groesbeck, Hamilton Co., O.
Dawson, William, Spiceland, Ind.
Dean, Geo. W., U. S. Coast Survey.
Dolbear, A. E., College Hill, Mass.
Doolittle, Prof. C. T., Lehigh Univ., So. Bethlehem, Pa.
Doolittle, M. H., U. S. Coast Surv. Office, Washington, D. C.
Doton, Hosea, A. M., Woodstock, Vt.
Draper, Dr. Daniel, Met. Observ., N. Y. Central Park.

DRAPER, HENRY, 271 Madison Ave., N. Y. City.
DRAPER, Prof. J. CHRISTOPHER, N. Y. City Free College.
DRAPER, Prof. Dr. J. W., Hastings-on-Hudson, N. Y.
DUDLEY, P. H., 27 W. 9th St., N. Y. City.
EASTMAN, J. R., Prof. of Math., Naval Observatory, Washington, D. C.
EATON, Prof. DARWIN G., Ph.D., Packer Inst., Brooklyn, N. Y.
EDDY, Prof. H. T., Univ. of Cincinnati, Cincinnati, O.
EDGECOMB, D. W., Hartford, Conn.
EIMBECK, Prof. WM., U. S. Coast Survey, Washington, D. C.
ELLIOTT, E. B., Treasury Dep't, Washington, D. C.
ENGELMANN, Dr. GEO. J., St. Louis, Mo.
ENGELMANN, HENRY, St. Louis, Mo.
EVANS, Prof. E. W., Cornell Univ., Ithaca, N. Y.
FERNALD, M. C., Orono, Me.
FERRELL, Prof. WM., U. S. Coast Survey Office, Washington, D. C.
FICKLIN, JOSEPH, Prof. Math. & Astron., State University, Columbia, Mo.
FORRAR, SAM'L, Dayton, O.
FRITHY, Prof. EDGAR, U. S. N. Observatory.
GANNETT, HENRY, Geodesist to Hayden's Surv., Washington, D. C.
GARDNER, Prof. JAS. F., Director State Survey, Albany, N. Y.
GEORGE, T. C., Univ. of the Pacific, Box 242 San Jose, Cal.
GILL, WM. L., Lancaster, Pa.
GILMAN, W. S., jr., Palisades, N. Y.
GLEASON, HERBERT, Malden, Mass.
GLEITSMAN, Dr. A., Ashville, N. C.
GOODFELLOW, E. D., U. S. Coast Survey,
GOULD, Dr. B. A., Cortobe, Argentine Confederacy, S. A.
GOWEY, H. D., Lewisburg, O.
GREEN, Lieut. Com. F. M., U. S. N. Dep't, Washington, D. C.
GREEN, JAMES, Grand St., N. Y. City.
GREENE, Prof. B. F., Navy Dep't, Washington, D. C.
GREENE, Lieut. F. V., Army Engineer Bureau, Washington, D. C.
GUMMERE, Prof. S. J., Haverford, Pa.
GUYOT, Prof. ARNOLD, Princeton, N. J.
HALL, Prof. ASEPH, U. S. N. Observatory, Washington, D. C.
HARKNESS, Prof. WM., U. S. N. Observatory, Washington, D. C.
HARLAN, Jos. J., Haverford, Pa.

HARPER, Prof. J. W., Woodward School, Cincinnati, O.
HARRINGTON, MARK W., Prof. Astron., Director of Observatory, Ann Arbor, Mich.
HASSON, W. F. C., U. S. N. Acad., Annapolis, Md.
HASTINGS, Dr. C. J., Johns Hopkins Univ., Baltimore, Md.
HAZEN, LEVI, C. E., West Hartford, Vt.
HEMPSTRAD, Dr. GEO. B. (formerly of Hanging Rock, O.), Portsmouth, O.
HENDRICKS, Prof. J. E., Des Moines, Iowa.
HENDRICKSON, Prof. W. W., U. S. N. Acad., Annapolis, Md.
HESS, OTTO, Fort Dodge, Iowa.
HICKOCKS, Prof. W. F., Burlington, Vt.
HILDRETH, Dr. S. P., Marietta, O.
HILGARD, Prof. J. E., U. S. Coast Surv., Washington, D. C.
HILL, GEO. W., Nautical Almanac Office, Washington, D. C.
HILL, Rev. THOMAS, Portland, Me.
HITCHCOCK, G. N., San Diego, Cal.
HOLDEN, Prof. EDWARD S., U. S. N. Observatory, Washington, D. C.
HOLDEN, L. L., Boston Daily Journal, Boston, Mass. Aeronautics.
HOUGH, Prof. F. B., U. S. Forest Commission, Lowville, N. Y.
HOUGH, Prof. G. W., Chicago, Ill.
HOWARD, E & Co., Astronomical Clock Makers, Boston, Mass.
HOWE, H. A., Mt. Lookout, O.
HOWERTON, WM. J., Garnett, Kans.
HOXIE, Lieut. R. L., U. S. A. Engineer, Washington, D. C.
HUMPHREYS, Gen. A. A., Army Engineer Bureau, Washington, D. C.
JOHNSON, Prof. W. W., St. John's Coll., Annapolis, Md.
JOY, Prof. CHAS. A,, Columbia Coll., N. City.
KAHLER, ——., Washington, D. C.
KEITH, Prof. R., Alexandria, Va.
KENDALL, OTIS E., Esq., Phila., Pa.
KENESTON, Prof. C. A., Ripon Coll., Ripon, Wis.
KEUTGEN, C., jr., Staten Island; Box 1794, N. Y. City.
KING, S. A., Office of Daily Graphic, Phila., Pa. [Aëronaut.]
KIRKWOOD, DANIEL, Prof. Math., Bloomington, Ind.
LAMBORN, GEO. S., Liberty Square, Lancaster Co., Pa.
LANE. J. HOMER, U. S. Coast Surv. Office, Washington, D. C.
LANGLEY, Prof. S. P., Director of Allegheny Observatory,

LARKIN, EDGAR L., New Windsor, Mercer Co., Ill.
Allegheny, Pa.
LEWIS, H. C., Germantown, Pa.
LEWIS, Hon. J. H., Mt. Vernon, O.
LOCKWOOD, Prof. H. H., U. S. Naval Observatory.
LONGSTREET, Prof. M. F., Friends Observatory, Phila., Pa.
LOOMIS, Prof. ELIAS, New Haven, Conn.
LOUD, Prof. F. H., Colorado Springs, Colo.
LOVERING, Prof. JOSEPH, Cambridge, Mass.
LULL, Com. E. P., U. S. Coast Surv. Office, Washington, D. C.
LYLE, DAVID A., Lieut. of Ordnance, U. S. A., National Armory, Springfield, Mass.
LYONS, Lieut. T. A., Hydrographic Office, U. S. Navy.
MACCONNEL, AUGUSTUS, Esq., Elmira, N. Y.
MALLERY, Col. GARRICK, Care Powell's Surv., Washington, D. C.
MARSHALL, Lieut. W. L., Army Engineers.
MCINTOSH, J. B., Hoboken, N. J.
MEANS, Rev. ALEXANDER, D. D., A. M., M. D., LL.D., Oxford, Ga.
MEECH, Prof. L. W., Hartford, Conn.
MILLS, GEO. E., Care G. W. & C. B. Colton, 174 Williams St., N. Y. City. (Now in Brazil.)
MITCHELL, Miss MARIA, Vassar Coll. Observatory, Poughkeepsie, N. Y.
MORSE, FRANK B., B. S., 13 Worcester Square, Boston, Mass.
MORTON, Prof. HENRY, Stevens Inst., Hoboken, N. J.
MOSMAN, A. T., U. S. Coast Surv. Office, Washington, D. C.
MYER, Gen. A. J., Chief Signal Officer, U. S. A.
NEGUS, T. S. & J. D. (Chronometer makers), 172 Water St., N. Y. City.
NEWCOMB, Prof. SIMON, Washington, D. C.
NEWTON, Prof. H. A., Yale Coll., New Haven, Conn.
NICHOLSON, W. L., Topographer to P. O. Dep't, Washington, D. C.
NORTON, J. HERBERT, Leicester, Vt.
NORTON, Prof. W. A., New Haven, Conn.
OLIVER, Prof. J. E., Cornell Univ., Ithaca, N. Y.
OSBORN, LUCIAN M., Hamilton, N. Y.
OSBORNE, GEO. E., Washington, D. C.
PAINE, ROBERT TREAT, Boston, Mass.
PARKE, Col. J. J., Army Engineer Bureau, Washington, D. C.

PARKER, J. D., Topeka, Kans.
PATTERSON, CARLISLE, Sup't U. S. Coast Surv., Washington, D. C.
PAUL, H. M., Ass't U. S. N. Observatory, Washington, D. C.
PECK, Prof. WM., Columbia Coll., N. Y. City.
PEDRICK, WM. R., Lawrence, Mass.
PEELOR, DAVID A., Johnstown, Pa.
PEIRCE, Prof. BENJ., Harvard Univ., Cambridge, Mass.
PEIRCE, CHAS. S., 42 Seventh St., N. Y. City.
PEIRCE, Prof. JAS. M., Cambridge, Mass.
PEROT, CHAS. P., 142 No. 18th St., Phila., Pa.
PETERS, Prof. C. H. F., Hamilton Coll, Clinton, N. Y.
PETTEE, Prof. W. H., Harvard Univ., Cambridge, Mass.
PHILIPS, Prof. G. MORRIS, A. M., Lewisburg, Pa.
PICKERING, Prof. E. C., Harvard Coll. Observatory, Cambridge, Mass.
PICKERING, W. H., 84 Mt. Vernon St., Boston, Mass.
POOLE, HERMAN, Buffalo, N. Y.
PRITCHETT, CARR W., Glasgow, Mo.
PRITCHETT, H. S., Ass't U. S. N. Observatory.
QUIMBY, Prof. E. T., Dartmouth Coll., N. H.
RANDALL. F. A., Union City, Pa.
RICE, Prof. J. M., Naval Acad., Annapolis, Md.
RINCK, HOWARD, Easton, Pa.
ROBERTS, C. H., Sup't City Schools, Rochester, Minn.
ROCK, MILES, Care Lieut. G. E. Wheeler's Surv. Office, Washington, D. C.
ROCKWOOD, Prof. C. G., jr., Princeton, N. J.
RODGERS, Rear Admiral JOHN, Sup't U. S. N. Observatory.
ROGERS, Prof. H. D., Boston, Mass.
ROGERS, J. A., Care U. S. N. Observatory, Washington, D. C.
ROGERS, J. E., Maryville Coll., Maryville, E. Tenn.
ROGERS, WM. A., Ass't Prof. Astron., Harvard Coll. Observatory, Cambridge, Mass.
ROSSITUR, Prof. J. R., Marietta, O.
ROWLAND, Prof. H. A., Johns Hopkins Univ., Baltimore, Md.
RUNKLE, Prof. J. D., Inst. Technol., Boston, Mass.
RUSSELL, THOMAS, Lake Surv. Office, Detroit, Mich.
RUTHERFORD, L. M., 172 2nd Ave., N. Y. City.
SAFFORD, Prof. T. H., Director Coll. Observatory, Williamstown, Mass.
SAWYER, EDWIN F., 36 School St., Boston, Mass.

SCHOTT, CHAS. A., U. S. Coast Surv. Office, Washington, D. C.
SEAGRAVE, FRANK E., L. B. 189, Providence, R. I.
SEARLE, ARTHUR, Ass't Harvard Coll. Observ., Cambridge, Mass.
SEARLE, Rev. G. M., St. Paul's Church, 9th Ave. & 57th St., N. Y. City.
SESTINI, Father, Woodstock, Md.
SHERMAN, O. T., Care Prof. Loomis, Yale Coll., New Haven, Conn.
SHERRILL, J. E., Danville, Ind.
SIGSBEE, Lieut. Com. C. W., U. S. Navy.
SIMPSON, Col. J. H., Army Engineer Bureau.
SKINNER, A. N., Ass't U. S. N. Observatory.
SNELL, Prof. E. S., Amherst, Mass.
SNOW, Prof. F. H., Lawrence, Kans.
STACKPOLE, ——, Astron. Inst. Maker, Fulton St., N. Y. City.
STOCKWELL, I. N., 579 Case Ave., Cleveland, O.
STONE, ORMOND, Cincinnati Observatory, Mt. Lookout, O.
STOREY, Prof. W. E., Johns Hopkins Univ., Baltimore, Md.
SWIFT, LEWIS, F.R.A.S., Ph.D., Rochester, N. Y.
SYLVESTER, Prof. J. J., Johns Hopkins Univ., Baltimore, Md.
TAYLOR, W. B., Care Smithsonian Inst., Washington, D. C.
TODD, D. P., Nautical Almanac Office, Washington, D. C.
TREMBLEY, Dr. J. B., Toledo, O.
TROUVELOT, L., 99 Garden St., Cambridge, Mass.
TROWBRIDGE, DAVID, A.M., Waterburgh, N. Y.
TROWBRIDGE, Prof. JOHN, Cambridge, Mass.
UPTON, WINSLOW, Ass't Engineer, U. S. Lake Surv., Detroit, Mich.
VAN DYCK, Prof. C. V. A., Syrian College, Beyrout, Syria. (American Protestant Mission.)
VAN DUZEE, WM. S., Lancaster, Erie Co., N. Y.
VAN VLECK, Prof. J. M., Wesleyan Univ., Middletown, Conn.
VERY, Lieut. S. W., Naval Acad., Annapolis, Md.
WALDO, LEONARD, S.D.(Harv.), Harvard Coll. Observatory, Cambridge, Mass.
WALKER, Prof. FRANCIS A., Yale Coll., New Haven, Conn.
WALLING, HENRY F., 103 Channing St., Boston, Mass.
WARD, H. D. A., Middletown, Conn.
WARNER, J. D., 199 Beltic St., Brooklyn, N. Y.
WATSON, Prof. J. C., Madison, Wis.
WHEELER, Lieut. GEO. M., Army Engineers.

WHEELER, ORLANDO B., Ass't Engineer, U. S. Lake Surv., 194 Clifford St., Detroit, Mich.
WILSON, A. D., Ass't State Surv., Albany, N. Y.
WINDER, Rev. D. K., 219 Seaton St., Toronto, Can.
WORTHEN, Rev. H. W., Chelsea, Vt.
WRIGHT, Prof. A. W., Yale Coll., New Haven, Conn.
WRIGHT, SAMUEL H., A. M., Ph.D., Penn Yan, Yates Co., N. Y.
YARNELL, Prof. M., U. S. N. Observatory, Washington, D. C.
YOUNG, Prof. C. A., Coll. of N. J., Princeton, N. J.
YOUMANS, E. L., Care Appleton & Co., 550 Broadway, N. Y.
ZENTMAYER, JOSEPH (Optical Instrument Maker), Phila., Pa.

METEOROLOGISTS.

ABBE, CLEVELAND, Army Signal Office, Washington, D. C.
ABBOTT, EDW. K., A. M., M. D., Salinas, Monterey Co., Cal.
ALEXANDER, JNO. B., M. D., Lexington, Mo.
ANDREWS, L., Southington, Conn.
ASTON, EDWD. J., Ashville, N. C.
BAKER, MARCUS, M.A., U. S. Coast Surv. Office, Washington, D. C.
BAKER, HENRY B., M. D., Lansing, Mich.
BALLOU, N. E., M. D., Sandwich, Ill.
BARCENA, Dr. MARIANA, Central Meteorological Observatory, Mexico City.
BARKER, EBENEZER, St. Mary's, Camden Co., Ga.
BARROWS, NATHAN, M. D., Meriden, N. H.
BARTLETT, ARTHUR K., Battle Creek, Mich.
BARTLETT, E. B., Vermillion, Oswego Co., N. Y.
BECKER, G. F., Ph.D., Univ. of Cal., Oakland, Cal.
BISHOP, CHAS. L., Jamestown, N. Y.
BLANCHARD, O. A., Elmira, Ill.
BOERNER, CHAS. G., Vevay, Ind.
BOWMAN, E. H., M. D., Andalusia, Ill.
BRACE, DE WITT B., Lockport, N. Y.
BRENDEL, FRED, M. D., Peoria, Ill.
BROWN, B., Stratford, N. H.
BULLARD, R. C. E., Litchfield, Mich.
BURR, FEARING, Hingham Centre, Mass.
CARPENTER, WM. B., M. D., Lansing, Kans.
CARPMAEL, CHAS., Deputy Sup't, Meteorological Office, Toronto, Can.
CHAMBERLAIN, S. N., Daytona, Volusia Co., Fla.
CHAPPLESMITH, JOHN, New Harmony, Ind.
CHENEY, WM., Minneapolis, Minn.
CLARK, B. W., Lockport, N. Y.
COFFIN, Prof. SELDEN J., Ph D., Easton, Pa.
COLLIN, JOHN, Shelburne, N. H.
COOK, WM. H., M. D., Carlisle, Pa.
COOK, Prof. W. J., Morris, Ill.
CROSIER, ADAM, Laconia, Ind.

CUTTING, HIRAM A., A.M., M. D., Lunenburg, Vt.
DAVIDSON, GEO., A.M., Ph. D., San Francisco, Cal.
DAWSON, WM., Spiceland, Henry Co., Ind.
DICKINSON, G. K., M. D., Jersey City, N. J.
DOTON, HOSEA, A. M., Woodstock, Vt.
EATON, DARWIN G. Ph.D., Prof. Physical Sci., Packer Inst., Brooklyn, N. Y.
EDMAN, J. A., Meadow Valley, Plumas Co., Cal.
ENGELMANN, GEO., M. D., 3003 Locust St., Phila., Pa.
FERNALD, M. C., Orono, Me.
FERREL, WM., Ph.D., Coast Surv. Office, Washington, D. C.
FERRISS, E. J., Little Mountain, O.
FLEMING, JOHN, Readington, N. J.
FOSTER, GRANVILLE F., Prof. of Meteorol., So. Ill. Normal Univ., Carbondale, Ill.
FULLER, A. N., Hermosa, Colo.
GREEN, GEO. C., Factoryville, Wyoming Co., Pa.
GREEN, HENRY A., Atco, N. J.
HALE, WM. H., Ph.D., 50 Clinton Ave., Albany, N.Y.
HAWORTH, JOHN, Hazleton, Pa.
HIGGINS, F. W., Detroit, Mich.
HINRICHS, Prof. G., M. D., Iowa City, Iowa.
HORN, H. B., M. D., Atchison, Kans.
HORR, ASA, M. D., Dubuque, Iowa.
HORR, EDW. W., Blandville, Ballard Co., Ky.
HOUGH, FRANKLIN B., Lowville, N.Y.
HUNTINGTON, J. H., Box 1914, Boston, Mass.
HYDE, G. A., Cleveland, O.
HYLAND, WM., Baxter Springs, Kans.
INGRAM, JOHN, M. D., Vineland, N. J.
IVES, WM., Buffalo, N. Y.
JONES, W. M., Rochester, N. Y.
KIDDER, L. D., Whitfield, N. H.
KINGSTON, Prof. G. T., Sup't Meteorological Office, Toronto, Can.
KIRKPATRICK, J. A., A. M., Phila., Pa.
KIRKWOOD, DANIEL, Bloomington, Ind.
LOOMIS, ELIAS, New Haven, Conn.
MEANS, Rev. ALEXANDER, D. D., A. M., M. D., LL.D., Oxford, Ga.
MOORE, NATHAN, Grampian Hills, Clearfield Co., Pa.
MORRIS, ORRAN W., Library Cooper Union, N. Y. City.
NASON, Rev. ETIAS. North Billerica, Mass.
NEILL, THOS., Venice, Erie Co., O.

NELSON, HENRY M., Georgetown, Mass.
NELSON, S. AUGUSTUS, Georgetown, Mass.
NIPHER, FRANCIS E., A. M., St. Louis, Mo.
OHLER, WM. H., 258 Middle St., Portland, Me.
OSBORN, ETHAN, Hennepin, Ill.
OSBORNE, J. W., 212 Delaware Ave. N. E., Washington, D. C.
PALM, SWANTE (Swedish Consul), Austin, Texas.
PARVIN, Prof. T. S., Iowa City, Iowa.
PECK, GEO. H., El Monte, Los Angeles Co., Cal.
PEDRICK, WM. R., Lawrence, Mass.
PEELOR, DAVID, C. E., Johnstown, Pa.
PERRY, H. C., Allowaystown, N. J.
PETTERSEN, FRED von, M. D., Comfort, Kendall Co., Tex.
PHELPS, E. S., Wyanet, Bureau Co., Ill.
PHELPS, SAMUEL B., Norwich, Vt.
ROBERTSON, ROB'T S., Fort Wayne, Ind.
ROGERS, D. D., Daytona, Fla.
SCRIBNER, Rev. H. F. J., Strafford, Vt.
SHRIVER, HOWARD, Wytheville, Va.
SIAS, SOLOMON, A. M., M. D., Schoharie, N. Y.
SISSON, R., La Plume, Luzerne Co., Pa.
SLADE, ELISHA, Somerset, Mass.
SMITH, E. KIRBY, Prof. Univ. of the South, Sewanee, Tenn.
SOULE, WM. M. S., Cazenovia, N. Y.
STALNAKER, J. W. M. D., Austin, Tex.
STEPHENSON, Dr. M. F., Gainesville, Ga.
STOLLEY, GEORGE, Austin, Tex.
STRENG, L. H., Grand Rapids, Mich.
TAYLOR, Prof. A. R., Lincoln, Ill.
TROWBRIDGE, DAVID, A. M., Waterburgh, N. Y.
TRUE, H. A., A. M., M. D., Marion, O.
VENNOR, HENRY G., F. G. S., Geolog. Surv. of Can., Montreal, Can.
WAIT, S. E., Traverse City, Mich.
WALTON, JOSIAH P., Muscatine, Iowa.
WEBSTER, Prof. NATHAN B., 45 Charlotte St., Norfolk, Va.
WELLS, WM. LEHMAN, M. D., 216 So. 9th St., Phila., Pa.
WHITEHEAD, WM. A., Newark, N. J.
WHITTINGTON, G., Mt. Ida, Montgomery Co., Ark.
WILBUR, BENJ. F., West Waterville, Me.
WILLIAMS, MILO G., Prof. Urbana Univ., Urbana, O.
WILLIS, OLIVER R., Ph.D., White Plains, N. J.
WING, M. E., West Charlotte, Vt.
WYLIE, WM. Mt. Forest, Ontario, Can.

APPENDIX.

COMPRISING new names, and corrections forwarded after the volume had gone to press. Those preceded by an asterisk indicate some change from that given in the body of the work.

ABBOTT, WM. G., Norwich, Conn. *Bot.*

ABBOTT, WM. L., 1926 Chestnut St., Phila., Pa. *Orn.* Coll. Ex.

ACKER, E. O'C., C. E., U. S. N., U. S. S. Alaska, Navy Dep't, Washington, D. C. *Min.*

ADAMS, EDWARD P., C. E., Box 444, Medford, Mass. *Topography, Bot., Geol.*

ALLCUTT, E. H., 906 Penn St., Kansas City, Mo. *Oöl., Con.* Coll. Ex.

ALLEN, Prof. JEROME, Genesee, N. Y. *Palaeo., Geol., Min.* Coll. Ex.

ALLING, MARY R., Springfield, Mass. *Geol.* Coll. Ex.

ANDREWS, H. B., Box 356, Rockford, Ill. *Geol.* Coll. Ex.

ARCHER, B. F., Camden, N. J. *Micros.*

ARNOLD, LEVATOR, Marshalltown, Iowa. *Min., Fossils.* Coll.

AYRES, GEORGE B., M. D., Ann Arbor, Mich. *Anat., Orn.*

BAILEY, C. H., Rome, Oneida Co., N. J., *Indian and War Relics.* Coll.

BAIRD, WILLIAM M., Charlestown, Ind. *Phæn. Bot., Ferns.* Coll. Ex.

BALL, Rev. E. H, Spring Hill, Cumberland Co., N. S. *Ferns, Phænogams,* (indigenous). Coll.

BALLARD, HARLAN H., Lenox, Mass. *Bot.*

BALLARD, Mrs. J. P., Easton, Pa.

BANKS, W. F., Bellona, Yates Co., N. Y. Coll.

BARBER, S. W., 303 Chamber of Commerce, St. Louis, Mo.

*BATEMAN, E. R., 3701 Woodland Ave., Phila., Pa. *Oöl.* Coll. Ex.

BERGEN, Mrs. FANNY, A. B., Deerfield, Mass. *Bot.*

BLAISDELL, Mrs. S. G., Poway, San Diego Co., Cal. *Ferns.* Coll. Ex.

*BLUNT, W. G., Naturalist and Taxidermist, 813 Market St., San Francisco, Cal.

BOSSEMEYER, J. F., Dixon, Lee Co., Ill. *Ent.* Coll. Ex.

*BOURNE, A. E., Woodstock, Ill. *Phæn.Bot., Mam.* Coll. Ex.

BOWDEN, CHAS., Camden, N. J. *Micros.*

BRAMLETTE, ADA, Clarksville, Johnson Co., Ark. *Geol.* Coll. Ex.

BREWSTER, A. B., 1065 Bluff St., Dubuque, Iowa. *Palæo.* Coll. Ex.

BRIGHAM, GEORGE L., Bolton, Mass. *Orn., Oöl., Ent.*

BROWN, ALBERT P., Ph.G., Camden, N. J. *Micros.*

BROWNE, F. C., Box 50, Framingham, Mass. *Orn.* Coll.

BRUNER, LAWRENCE, Lincoln, Neb. *Ent., Con., Fossils.* Coll. Ex.

BRYAN, Col. T. M., Vincentown, Burlington Co., N. J. *Palæo.*

BUCKHAM, JAS. N., M. D., Ph. D., Flint, Mich. *Orn., Oöl.* Coll. (*Bot.*) Ex.

BURGESS, THOS. J. D., M. D., M. C. P., Ass't Sup't, Asylum for the Insane, London, Ontario, Can. *Bot.* Coll. Ex.

BUSEY, SAMUEL C., M. D., 1525 I St. N. W., Washington, D. C. *Medicine.: Theory and Practise.*

*BUTLER, A. W., Brookville, Ind. (Winter and Spring in Mexico making collections in *Orn., Con.* and *Bot.* Desires to exchange specimens from there for the rarer American species.

CALKINS, J. W., Santa Barbara, Cal. *Con., Algæ.* Coll Ex.

*CASSINO, SAMUEL E., Boston, Mass. *N. A. Filices, Ent.*

CHANEY, L. W., jr., A. B., B. S., Northfield, Rice Co., Minn. *Ent., Orn., Geol.* Coll. Ex.

CHAPMAN, GEO. W., M. D., Waconda, Mitchell Co., Kans. *Min.* Coll. Ex.

CHAPMAN, JOHN H., Box 5, Newburgh, Orange Co., N. Y. *Orn., Reptiles.* Coll. Ex.

CLARK, BENJ. PRESTON, Care of B. C. Clark & Co., 55 Kilby St., Boston, Mass. *Phæn.Bot.* Coll. Ex.

CLARK, WM. D., Camden, N. J. *Micros.*

CLARK, JOHN M., Canandaigua, N. Y. *Geol., Zool., Min.* Coll. Ex.

CLAYTON, J. E., Salt Lake City, Utah. *Geol.*

COATES, LINDLEY, cor. 10th & Penn Sts., Kansas City, Mo.

Oöl. Coll. Ex.

COCHRAN, SAM'L W., Camden, N. J. *Micros.*

COLLETT, JOSEPHUS, Terre Haute, Ind.

COLLING, THOS. R., Utica, N. Y. *Bot., Mycology.*

COOK, G. H., State Geologist of New Jersey.

CORBUSIER, WM. H., M. D., Ass't Surg. U. S. A., Care of Surg. Gen. U. S. A., Washington, D. C. *Ethnol., Anthropol.* Coll.

COTTMAN, JOHN M., Rome, Oneida Co., N. Y. *Min., Ent.* Coll. Ex.

CRANCH, EDW., M. D., 109 W. 9th St., Erie, Pa. *Ent., Micros.* Coll. Ex.

CURRIER, JOHN M., M. D., Castleton, Vt. *Archæo., Min., Ethnol., Palæo., Anthropol.*

CUSICK, WM. C., Union, Union Co., Oregon. *Bot.* Coll.

*DEATRICK, Rev. W. W., Milton, Northumberland Co., Pa. *Bot.* Coll. Ex.

DE LA COUR, J. C., Camden, N. J. *Micros.*

DE LA COUR, J. L., Camden, N. J. *Micros.*

DELAFONTAINE, Prof. MARC, Ph.D., 20 No. Sangamon St., Chicago, Ill. *Min., Palæo.* Coll. Ex.

DICKERMAN, Rev. W. F., Napoleon, Henry Co., O. *Micros., Diatomaceæ.* Coll. Ex.

DIVELY, GEORGE, cor. 10th & Penn Sts., Kansas City, Mo. *Oöl.* Coll. Ex.

DODGE, J. A., Ph.D., Prof. Nat. Sci., Baldwin Univ., Berea, O.

DOTEN, FREDERICK B., Chicopee, Mass. *Micros.*

DWIGHT, THOS., M. D. (late Prof. of Anat., Medical School of Maine), Instructor of Histol., Harvard Univ., 70 Beacon St., Boston, Mass. *Anat. of Vert., Histol.*

DWIGHT, WM. B., Prof. Nat. Hist., Vassar Coll., Poughkeepsie, N. Y. *Geol., Zöol.*

EASBY, WILLIAM, Media, Delaware Co., Pa. *Ent.: Lepidoptera.* Coll. Ex.

ELLIOTT, W. S., M. D., D.D.S., Goshen, Orange Co., N. Y. *Min.* Coll. Ex.

ENGLE, ROB'T H., Raleigh, N. C. *Archæo., Min., Geol., Con.* Coll. Ex.

*ELLIS, I. WALTER (F.F.S., N.B.A., and corresponding member R. S., England), Amherst, N. S. *Geol.*

FAIRCHILD, A. K., Whippany, Morris Co., N. J. *Orn.* Coll. Ex.

*FERRISS, E. J., Little Mountain, O. *Bot., Nat. Hist.*

FORTINER, GEORGE R., M. D., M. D., Camden, N. Y. *Micros.*

FORTINER, HARRY S., Camden, N. J. *Micros.*

FOSTER, WILLIAM L., Hanover, Plymouth Co., Mass. *Bot.* (*Native Plants*).

FOX, J. W., Stony Point, Bourbon Co., Ky. *Geol.* (Lower Silurian a specialty), *Bot.* Coll. Ex.

FRANCE, JOHN M., Omaha, Neb. *Orn.: Birds of the Missouri Valley.* Coll.

GARRISON, C. G., M. D., Camden, N. J. *Micros.*

GIBHART, Prof. WM., Schoharie, N. Y.

GOODSPEED, A. M., Falmouth, Mass. *Bot.* Coll.

GOTT, JOSEPH W., Esq., Goshen, N. Y. *Min., Geol., Palæo.* Coll.

GOULD, ANNIE M., Upper Stillwater, Me. *Coleoptera, Bot., Oöl.* Coll. Ex.

GRACIE, ALEXANDER G., Box 26, Summit, N. J. *Orn.* Coll. Ex.

GREEN, JESSE A., Crawfordsville, Ind. *Orn.* Coll. Ex.

GREEN, JESSE C., D. D. S., West Chester, Pa. *Micros.*

GRIFFITH, S. F., Ass't Surg. U. S. N., U. S. S. Alaska, Navy Dep't, Washington, D. C. *Micros.*

GRONEN, W. OTTO, C. E., Arsenal, Rock Island, Ill. *Amaryllids.* Coll. Ex.

HACKER, WILLIAM, 242 So. 4th St., Phila., Pa. *Orn., Bot.* Coll. Ex.

HAIMBACH, FRANK, 2307 Thompson St., Phila., Pa. *Lepidoptera.* Coll. Ex.

HARBISON, W. F., Spencerville, O. *Archæo., Geol., Palæo.* Coll. Ex.

HARE, R. B., B. A., Ph.D. (Breslau), Bell's Corners, Ontario, Can. *Min., Geol.*

HARRINGTON, Rev. W. H., Stillwater, Minn.

HASKELL, FRANK, 6 Sumner St., W. Gloucester, Mass.

HAY, GEORGE U., Sec. Nat. Sci. Club, St. John, N. B. *Bot.*

HAY, O. P., Prof. Nat. Hist., Butler Univ., Irvington, Ind. *Fresh Water Fishes, Crustacea.* Coll. Ex.

HEFFNER, Prof. GEO. H., Principal Acad., Womelsdorf, Berks Co., Pa. *Bot.* Coll. Ex.

HERRICK, FRANCIS H., Hanover, N. H. *N. H. rocks and Minerals* for exchange.

*HERVEY, Rev. A. B., Taunton, Mass. *Ferns, Mosses,*

HEYS, Prof. THOMAS, Toronto, Can. *Min. Lichens, Algæ.* Coll. Ex.

HIGGINSON, CHAS. M., M. E., Chicago, Ill. *Min.* Coll. Ex.

HOLDREDGE, D. D., Medina, N. Y. *Tax.* Coll. Ex.

HUBBARD, Miss R. S., 283 Kinsman St., Cleveland, O. *Phæn. Bot., Ferns.*

HUNT, A. M., C. E., U. S. N., U. S. S. Powhatan, Navy Dep't, Washington, D. C. *Petrology.*

*INGERSOLL, ERNEST, U. S. Commission of Fish and Fisheries, Washington, D. C. *Mam., Orn., Mollusks.*

KAIN, Prof. HENRY C., Camden, N. J. *Micros.*

KEENE, W. T., 96 Washington St., Chicago, Ill.

KENNEDY, FRANK, Washington C. H., Fayette Co., O. *Geol.* Coll. Ex.

KEYWORTH, THOMAS, Marissa, St. Clair Co., Ill. *Ent.* Coll. Ex.

KIDDER, J. H., A. M., (Harv.), M. D. (Univ. of Md.), Surgeon U. S. N., Navy Dep't, Washington, D. C. Care of B. F. Stevens, U. S. Despatch Agent, 4 Trafalgar Square, London, Eng. *Nat. Hist.*

KNOWLES, CHAS., The Ferns, Tampa, Fla. *Bot., Hort., Gen. Nat. Hist.*

KNOX, Mrs. E. C., Morrison, Whiteside Co., Ill. *Bot.* Coll. Ex.

KNITHAN, E. F., Nauvoo, Hancock Co., Ill. *Orn., Oöl.*

LARKIN, EDGAR L., New Windsor, Mercer Co., Ill. *Geol., Gen Biol.* Coll. Ex.

LEE, FREDERIC S., Teacher of Nat. Sci., Liberal Inst., Fort Plain, N. Y.

LIPPINCOTT, GEORGE A., Watsontown, Northumberland Co., Pa. *Ent., Tax.* Coll. Ex.

*MACFARLANE, JAMES, Ph.D. Corning, N. Y. *Local Geol.*

MACK, EDWARD, 417 Fourth St., Washington, D. C. *Architecture.*

MARCY, ALEX., M. D., Camden, N. J. *Micros.*

MARKOE, GEO. F. H., Ph.G., 61 Warren St., Boston, Mass. *Pharm.*

MARSH, Prof., Oxford, O.

MARTIN, Prof. WM. J., Davidson College, Mecklenburg Co., N. C. *Geol.*

MAYER, Prof. ALBERT M., Stevens Inst. Tech., Hoboken, N. J.

MCCORD, DAVID, Oxford, O.

McKay, A. H., B. A., B. Sc., Prin. Pictou Acad. and Public Schools, Pictou, N. S. *Musci, Bot., Gen. Biol.* Coll.

McMurtrie, Wm. E., M., Ph.D., Dep't of Agr., Washington, D. C.

Mcnair, Lieut. Com. A. R., U. S. N.; Pres. Nat. Hist. Soc., Saratoga, N. Y.

Melcher, Wm. P., M. D., Camden, N. J. *Micros.*

Michael, Geo. W., jr., Morro Bay, San Luis Obispo Co., Cal. *Geol., Min.* Coll. Ex.

Middleton, M. F., M. D. Camden, N. J. *Micros.*

Mignault, J. O'C., 155 Bleury St., Montreal, Can. *Ent.* Coll. Ex.

Miller, H. D., Plainville, Conn. *Min.* Coll. Ex.

Mills, Samuel Dillon, Esq., Princess St., Kingston, Can. *Geol., Min.* Coll. Ex.

Mitchell, Louis J., Chicago, Ill. *Orn., Oöl.* Coll.

Mitchell, M. Sid., Rome, Oneida Co., N. Y. *Gen. Nat. Hist.* Coll.

Moody, Prof. Edw. F., Camden, N. J. *Micros.*

Morgan, Hon. Lewis H., LL.D., Rochester, N. Y. *Ethnol., Zöol.*

Morrill, Albro D., Teacher Nat. Sci., Lewistown Acad., Lewistown, Pa. *Bot.; Ent.: Coleoptera; Geol.* (Formations II & VI of Dana). Coll. Ex.

*Munroe, Miss E. F., East Cambridge, Mass. *Min.*

*Morse, Prof. Edw. S., Salem, Mass. *Gen. Zoöl., Archæo.*

Murdock, Hon. H. R., Stillwater, Minn. *Geol.*

Murdock, Mrs. H. R., Stillwater, Minn. *Bot.*

Murdock, J. B., U. S. N., Care J. N. Murdock, Box 21, Boston, Mass. *Geol., Min.* Coll.

Nachtrieb, Henry F., 524 4th Ave. S., Minneapolis, Minn. *Ent.* [Insects injurious to vegetation; Hemiptera a specialty.]

Neally, Geo. T., Burlington, Iowa.

Newcomer, I. W., Petersburg, Ill. *Bot.*

Nichols, D. A. A., Editor of "Country Gentleman," Albany, N. Y. *Bot.*

Ordway, Prof. John M., Mass. Inst. Tech., Boston, Mass. *Biol.*

Osborn, Lucian M., Hamilton, N. Y. *Phys. Sci.*

Packer, Miss Anna, Bonaparte, Iowa.

Patterson, Rob't, Ph.G., Camden, N. J. *Micros.*

PEATTIE, WM. I., Jobstown, Burlington Co., N. J. *Ent.: Coleoptera, Lepidoptera; Bot.: Ferns.* Coll.
PILLING, JAMES C., Box 585, Washington, D. C. *Ethnol.*
PILLSBURY, F. I., Dubuque, Iowa. *Bot.*
*POWELL, J. W., Ph.D., Box 585, Washington, D. C. *Geol., Ethnol., Philol.*
*PUMPELLY, RAPHAEL, In charge of Division of Mining, Geol., U. S. Geolog. Surv., Newport, R. I. *Geol.* Coll.
PURDY, M. S., Ithaca, N. Y. *Ent., Infusoria.* Coll.
RATTAN, VOLNEY, Teacher Nat. Sci., Girls' High School, San Francisco, Cal. *Bot.* Coll.
RIDLER, CHAS. E., A. M., High School, Kingston, Mass. *Bot.* Coll. Ex.
ROACH, Dr. PAUL, Quaker Sreet, Schenectady Co., N. Y.
ROBERTSON, W. D., Clinton, Iowa, *Geol.* Coll.
ROSS, JAMES A., Amity, N. Y. *Min.* Coll. Ex.
RUIZ, JOAN DONDE, 4*a* calle de los Rosados No. 48, Merida, Yucatan, Mexico. *Bot., Zool. Spec.—Orn., Ent.*
SHATTUCK, LYDIA W., South Hadley, Mass. *Bot.* Coll. Ex.
SHERMAN, O. T., Newburgh, N. Y. *Mathematics.*
STEBBINS, Miss KATHARINE, Kazenovia, N. Y. *Ent.: Lepidoptera.* Coll.
STONE, Miss M. L., East Cambridge, Mass. *Geol., Min.*
TEST, ALFRED W., Camden, N. J. *Micros.*
VERY, SAMUEL WILLIAMS, Lieut. U. S. N. Acad., Annapolis, Md.
WALES, Rev. F. H., Placer, Dutch Flat Co., Cal. *Min.* Coll. Ex.
WHITE, CARRIE D., W. F. Seminary, Oxford, O.
*WILLARD, ARTHUR W., Boston, Mass. *Lepidoptera, Orn.*
WILLIAMS, THOS. M., Adel, Dallas Co., Iowa. *Ent.* Coll. Ex.
WINSLOW, CHAS. T., N. E. cor. Beale & Bryant Sts., San Francisco, Cal. *Mollusks, Ent., Ichth., Crustacea.* Coll. Ex.
WROTH, JAS. H., Camden, N. J. *Micros.*

CHEMISTS.

AYRES, BROWN, Fellow Johns Hopkins Univ., Baltimore, Md. Phys.
BAKER, WM. H., Brooklyn, N. Y. Chem.

BECKWITH, LEONARD F., N. Y. City. Chem.
DEBRUNNER, WM. G., Pittsburg, Pa. Chem.
FERRELL, WM., Ph.D., Coast Surv. Office, Washington, D. C. Math.
FIELD, A. W., Cambridge, Mass.
FISHER, DAVENPORT, 642 Marshall St., Milwaukie, Wis.
FLETCHER, LAWRENCE B., Fellow Columbia Coll., Johns Hopkins Univ., Baltimore, Md. Phys.
FRANCE, JOHN M., Pharmacist, Omaha, Neb.
GOOCH, F. A., Ph.D., Cambridge, Mass. Chem.
GREEN, WM. H., Phila, Pa.
HALL, EDWIN H., Fellow Johns Hopkins Univ., Baltimore, Md. Phys.
HILLS, E. R., Blue Hill, Me.
JOHNSON, CHAS., New Brighton, Staten Island, N. Y.
MABERY, C. F., Ass't in Chem., Harv. Univ., Cambridge, Mass.
NICHOLS, EDW. L., Ph.D., (Gött.), Fellow Johns Hopkins Univ., Baltimore, Md. Phys.